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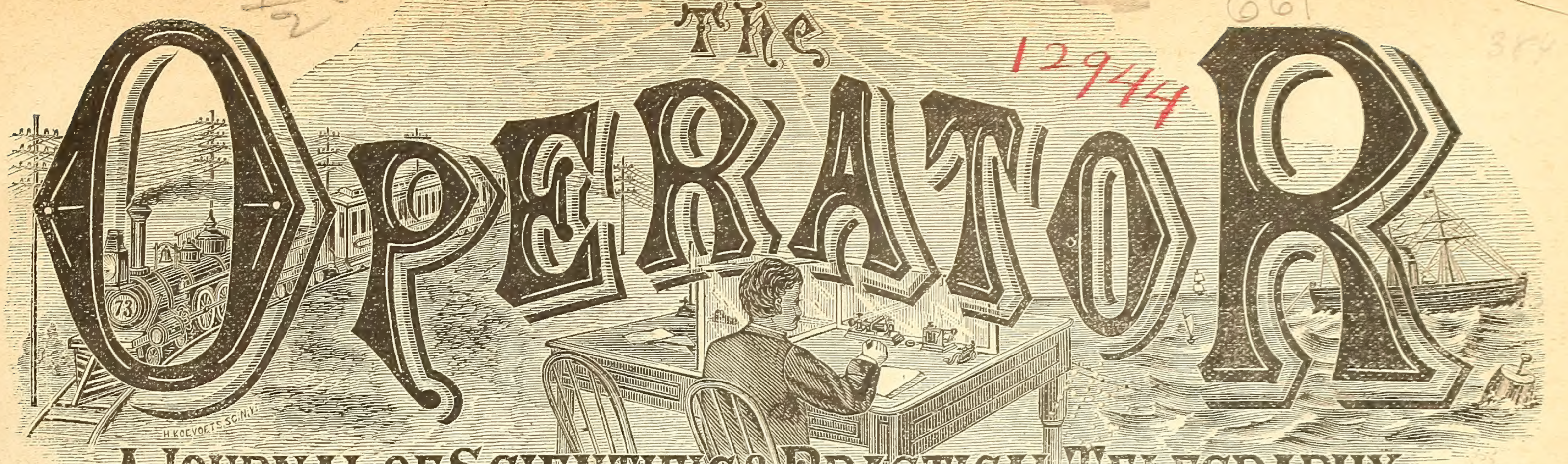

THE OPERATOR

A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

VOL. VII. NEW YORK, MARCH 1, 1877. No. 1

THE OPERATOR.

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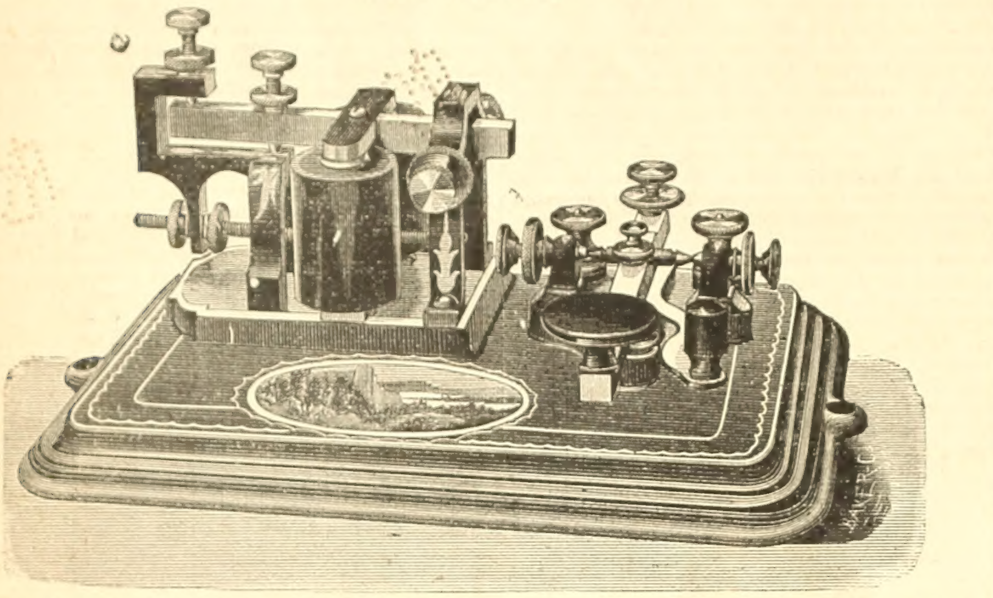

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The Di-electrical properties of Kerite have been tested in every conceivable manner during the last few years, and its superiority over all other kinds of insulation fully demonstrated.

Its durability has been proved by constant exposure to the sun and atmospheric changes of the thousands of miles of covered wire in use by the Fire Alarm and Telegraph Companies in many of the principal cities of the country. It has been largely used in the City of New York, under all conditions and exposures, for the last nine years, and at the present time its resistance is as great as when at first exposed.

The facts are now fully established that Kerite is not injuriously affected by the extremes of heat and cold experienced in any climate, nor by length of exposure in the atmosphere.

It will endure long continued heat below 200° Fahrenheit, while for short intervals it may be subjected to 250° or 300°; and it may be safely immersed in boiling water.

The action of water, salt or fresh, not only protects all its qualities, but very much improves its insulation.

It is also unchanged by being placed in the ground.

Any corrosive elements in the earth do not act upon it, nor is it injured by the roots of plants, which soon destroy gutta-percha.

Acids act very slowly upon it, and then only to the extent of oxydizing the surface.

It will bear exposure to hot, strong solutions of alkalies without injury.

Mineral oils and illuminating gas, so far as known, do not produce any serious effect upon it.

Exposure in a city gas pipe has not injured it.

Thorough experiments have shown that it does not suffer injury by the most destructive insects of land or water.

Samples of the core or insulated conductor of Kerite cables have for a long period been laid in the Caribbean Sea, yet the "teredo," which would have speedily destroyed other cables thus exposed, has left these entirely unharmed. And experimental lines on the Isthmus have been equally exempt from the ravages of the white ant, which destroys wood telegraph poles so rapidly that iron poles have been substituted.

The same qualities which render it so indestructible by all corrosive agents, insure its durability for an indefinite period in all climates.

Neither gutta-percha nor vulcanized India-rubber will bear storage in tropical climates without rapid deterioration, and undergoing chemical changes, which destroy their essential qualities, while under the same conditions the Kerite insulation is not changed in any respect.

The Kerite covered wire is used almost exclusively by the United States Navy Department in the torpedo experiments which have been going on during the past three years. Prof. Farmer, the Government Instructor, says of it: "It fulfils the conditions required in the torpedo service better than any insulator with which I am acquainted."

John L. Lay, Esq., the inventor of the famous torpedo bearing his name, says that he thoroughly tested the Kerite cable in this country and also in Egypt, and finds it preferable to rubber or gutta-percha, heat not affecting it, and so far as his experience goes, it is proof against the "teredo."

Messrs. Gamewell & Co., proprietors of the American Fire Alarm and Police Telegraph, have used the Kerite wire for ten years. They say: "We have placed it in use in some sixty cities, extending from Halifax, Nova Scotia, on the north, to New Orleans and San Francisco on the south and west, embracing every variety of climate, and it has proved itself to be, under all circumstances, the most reliable and indestructible insulator known to us for telegraphic purposes."

The experience of other parties using the Kerite coated wire overhead, underground, and under water, is almost precisely similar, and is well summarized in the following opinion of George B. Prescott, Esq., the Electrician of the Western Union Telegraph Company. Mr. Prescott says: "In September, 1869, we placed some of your Kerite wire, unprotected by any covering whatever, in the tunnel under the river in Chicago, and have since continued its use in that exposed situation with the most gratifying results. A portion of the tunnel is very wet, and water, saturated with lime, constantly drips upon the wires, while in other portions they are kept alternately wet and dry, which is well known to be one of the severest tests that any insulating material of an organic nature can be subjected to; and yet, after five years' exposure, under the above conditions, the Kerite covering shows no signs of decay or deterioration. An insulating covering of India-rubber or gutta-percha under a like exposure, would have been destroyed in much less time."

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THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

March 1st, 1877.

Volume VII. **Whole No. 73.**

The Telegraphers' Song.

From every corner of the earth
  The startling news we bring;
We weave a girdle round the globe
  And guide the lightning's wing.

Far as the distant thunder rolls
  O'er stream and rock and sea,
We join the nations in one clasp
  Of friendly unity.

We touch our key, and, quick as thought,
  The message onward flies—
For every point within the world
  Right at our elbow lies.

We bring of markets true reports,
  Of stocks and bonds and shares;
And post our patrons every day
  On all the great affairs.

Ours is the greatest boon to man
  That genius yet has given—
To make a messenger of thought
  The lightning bolts of Heaven.

JAMES WYLLIE.

Important Meeting of the A. & P. Co.

A very important meeting of the directors of the Atlantic and Pacific Telegraph Company was held at their Broadway office February 20th. The meeting was fully attended, owing to the general interest felt in the comtemplated changes, which are announced, semi officially, to amount to an entire reorganization of the Board. On the organization of the meeting the resignations of the following gentlemen were tended and accepted: Mr. Charles J. Osborne, Mr. James D. Smith, Mr. William H. Guion, Mr. Albert B. Chandler, and Mr. S. M. Mills. To fill the vacancies thus made the following gentlemen were nominated and unanimously elected:

Mr. J. W. Garrett, President Baltimore and Ohio Railroad Company, Mr. Thomas A. Scott, President Pennsylvania Central Railroad Company, Mr. H. J. Jewett, receiver Erie Railway Company, Commodore C. K. Garrison, and Mr. James R. Keene.

Mr. Thomas T. Eckert, President of the Atlantic and Pacific Telegraph Company, then submitted a special report, in which he recommended the construction of 10,000 miles of new lines, completing the present system of wires operated by the company and connecting every important city and town in the Union. Work on the main lines, in his judgment, should be commenced immediately, and the branch network extending to the small towns should be constructed afterward as rapidly as possible. The report was adopted enthusiastically, and the work on the new lines will, it is stated, be begun at once in accordance with the vote. To provide the sinews of war $600,000 was subscribed, to be paid into the treasury of the company by instalments of twenty five per cent a month. This subscription takes up the remaining $3,000,000 of authorized stock previously undisposed of at the market rate of twenty per cent. of its face value.

A sweeping reduction of rates was determined upon, but the details were left to be perfected at a a subsequent meeting, to be held on February 26. Numerous advantages will, it is claimed, result from the new movement, but the directors profess not to challenge comparison and competition, but to conduct their lines on an independent basis. In conversation with several prominent directors the position and claims of the company were substantially stated as follows:

They take the ground that the Atlantic and Pacific Telegaph Company has been the pioneer in extending the benefits of cheap telegraphic communication to the public. Wherever they have been in competition with the Western Union a reduction of rates has been the result. Twice already their rates on messages have been reduced, and the Western Union have been forced after a contest of some length to accept the standard set them. They propose to join the Atlantic and Pacific, the great lakes, and the Gulf of Mexico in one comprehensive electric bond. If a due regard for the just claims of the stockholders shall justify the step, the cities and towns of the Union will be placed in close communication with each other at so slight a cost that long messages may be sent from town to town, which are now slowly delivered by mail.

Exactly what reduction will be made can not be stated positively, and it has not yet been decided whether a standard in which the distance shall govern the rates with comparative exactness shall be adopted or not. The charge of twenty-five cents per message of ten words between any two points east of the Mississippi, and of $1 for similar messages sent across the continent, has been favorably considered and may be decided upon. The reductions will be at once, and go into effect upon the lines now under the control of the company without waiting for the completion of the new lines.

A complete list of the Board of Trustees of the reorganized company is appended: Oliver Ames, Elisha Atkins, Benjamin E. Bates, J. W. Garrett, T. Gordon Dexter, Sidney Dillon, G. M. Dodge, Thomas T. Eckert, Jay Gould, J. R. Keene, C. P. Huntington, Christopher Mayer, H. J. Jewett, J. H. Mortimer, C. K. Garrison, G. G. Sampson, Thomas A. Scott, W. J. Syms, Henry M. Taber.

Joseph Christie (Werner)

Was born in Manchester, England, but came to the United States while yet young, making Philadelphia his home. During 1869, '70, '71 he was in Utah, Wyoming, and California. In the latter part of 1871 he visited South America, returning ere long to the United States *via* the West Indies. Until within the past year Mr. Christie has been an attaché of the Western Union Telegraph Company's Philadelphia office, filling various positions, in all of which he served with honor to himself and advantage to his employers. At present he is one of the representatives of the Associated Press in Philadelphia, and apparently a rising man. Mr. Christie is best known to his immediate associates as an operator of unusual expertness and finish; to the remainder of the profession he is best known as the author of the contributions to THE OPERATOR variously signed "Junius," "Beppo," "Werner." His writings are perhaps the best, viewed in a purely literary light, that have yet been offered by a telegrapher for the entertainment of telegraphers. Possessing the rare faculty of perceiving humor wherever it exists, kind hearted, sypathetic, and keenly appreciative of worth in others, Mr. Christie has a vein of satire withal which has many times and oft stood him in good stead. The unrelenting enemy of all petty abuses and tyrannies calculated to demoralize or degrade his brethren, he has repeatedly subjected such abuses and tyrannies to a round of ridicule at once scathing and polished, which generally resulted in an amelioration of the evil, while those who had been at fault were left as much in the dark as to how and when they received their hurt as the Persian soldier of tradition beheaded with the magic scimeter without knowing it. While Mr. Christie, therefore, has all along disavowed any particular ability as a writer, it must be conceded that he stands in the foremost rank among those of his kind. He is, moreover, a very expert draughtsman, a caricaturist of much cleverness, and, better than all, a painter, who gives promise of future distinction. Added to all these accomplishments, Mr. Christie possesses charms of mind and a sterling worth of character which he does not proclaim from the housetop, but which a long and intimate acquaintance surely reveals, while his familiarity with books, with political and social methods, and the higher arts stamp him as a man of studious instincts, with an inherent taste for anything which is good, noble, and elevating.

◆

Rural Advantages.

After the drudgery of the week is at an end, how pleasant it is for operators or lesser mankind to ramble out into the inviting fields of a rural town and breathe the quiet air of peace and content, and how much that pleasure is enhanced if your companion be of the opposite sex; one in whom your whole affection is centered, whose every word and thought sets upon and attracts you just as relay magnets draw the devoted armature toward them, giving harmonious responses. But it is not absolutely necessary to the success of such an enterprise that the sexes be opposite, since Howard, our genial pressman, and myself took a stroll similar to that alluded to and demonstrated to our satisfaction that feminine companionship is not indispensable to serene enjoyment. Certainly we should have been delighted to have had two refined young lady operators with us—applications by postal card inclosing lock of hair and stamp for reply cheerfully solicited. It would have added that spiciness to our life for that day that variety always gives, and in completing the effort at seasoning that others had begun by salting us, would have probably made us relish the trip more.

As we passed along Howard seemed meditative, and manifested this disposition till we reached the surburbs. I did not care to break in upon his meditations, knowing that—like a paper operator to whom a message has been sent which he deciphers by slow degrees, leaving his key open during the process—an interruption would only make further delay imperative, that the result of the one's reflections and the other's decipherings would be most readily realized by patience, so I waited.

"Ruddy," said he, at length, "did you ever notice the many advantages enjoyed by country operators over those in cities?"

"Why, no," I replied, "I never did; and for the good reason that they do not enjoy any such advantages. In the cities wages are higher, hours are shorter, and the chances of being raised are better."

"Hold! young man," he replied, "such objections are quickly and effectually put to flight. You say wages are higher in the cities. Do you mean to say wages are not hire in the country, too? Again you claim that the hours are shorter in the city. Did you ever hear New York or Boston claim that the standard sixty minutes was wrong? And as to the chances of being raised being better in the city, ask any country messenger who has experienced the kicks of indignant men in this wicked world! But," he added, in a more serious strain, "it is not in the special and insignificant senses of wages, brevity of daily service, or promotion, that I look at the question, but in the broad light of health and morals, and especially with respect to the opportunity we have of indulging in innocent recreations. For instance, here are you and I walking over these rural hills in peace. No temptations beset us. Everything we see is abundantly suggestive of pure thoughts and guileless conversation. See that old mill," he continued, pointing to a venerable wooden structure nestling in the bosom of the valley just below us. "See its old wheel, the rough stone foundation, the moss covered roof, the murmuring brook passing near it shaded by those drooping willows! See the old miller at the door enjoying, like us, an hour of rest and recreation! Is not the [illegible] of a scene like this priceless? On the other hand, [illegible] ourselves in a large city to-day, and sallying forth for a walk. We should never reach the suburbs, but would reach the mall—the [illegible]—and ascend the marble steps up, up, yet down, down, down. Every step would take us [illegible] higher, but morally lower. If we entered the gilded saloon we should think that the [illegible] of the mill pond was replaced by the Morse of the city, collected in great quantities within. We should find them seated around a [illegible] table, gazing intently [illegible] features. We shall see the [illegible] of the old mill [illegible] the finger. Everything there is indicative of [illegible] enjoyment. We hear a voice exclaim, "Well, if you [illegible] take three, [illegible] it!" "Now, [illegible], keep back your [illegible]." "He's gone [illegible]; I've got him." The reply is, "Nothing across the board," and the game proceeds. It inclined me [illegible] something—a drink and a hand-card from [illegible] at last [illegible] with a throbbing head and [illegible]—

"Good day, young men; [illegible] for a walk?"

It was the cheery voice of the miller as the [illegible] and we [illegible] down the hillside over rough [illegible], and through [illegible] before we [illegible] him. His first remark was rather surprising. "I see you are both telegraph operators."

"Well, good sir," I replied, "in past years we were frequently dubbed 'plugs,' [illegible], 'office boys,' and other vile titles expressive of men who are in our trade what a fellow is in yours who can't tell [illegible] from wheat, rye from barley, oats from [illegible], whose only experience in grinding corn has been with his teeth, yet who perpetually insists that he is a first-class miller. But as time has effected creditable changes in us both, and these vile epithets have ceased to be applied to us, we conclude, as you do, that we are really operators. But," continued I, anxious to know how he so readily and accurately declared our profession, "may I ask you, good friend, how you came to this conclusion?"

"Yes, you may," said he, without venturing the information.

"Well," said I, after a moment's awkward hesitation.

"Well, why don't you ask me? I have said you might."

We both laughed outright at the good old fellow's ignorance of the conventional term "may I ask you." Howard nudged me with his elbow and I winked knowingly at him in return. We were both happily ignorant of what was in store for us, so we laughed. I thought it best not to attempt an explanation, so I simply asked:

"How do you know that we are telegraph operators?"

"Oh!" he replied, "I see that by the style of your hats [illegible]."

How rapidly we scrambled away from that old mill [illegible], though [illegible] back to the [illegible]. But that remark of the miller was [illegible]. We were irate, and the insult rankled in our hearts. "Let us forget it," said Howard. "Never!" said I, with anger in my tone, and a rock in my hand. "Never! while I have the pride of an operator to resent it and the arm of youth to propel this [illegible]," saying which I threw the stone toward the mill. Oh, how swiftly it sped, on, on, on, cleaving the air like a missile of death seeking a victim. [illegible] the mill a little child with golden curls, the miller's little pet, came out [illegible]. Howard and I breathed hard. Perspiration broke out upon our foreheads. On came the child, on sped the stone. Finally it struck—about seventy-five feet from the old mill, [illegible] where it was intended. The child went to the father and [illegible]. Everything [illegible] all around us.

We [illegible] along. As far as the eye could reach Nature was attired in her most varied and brilliant robes. As each new scene unfolded itself to me [illegible] some happy thought would suggest itself. [illegible] this remark: "Oh, Ruddy, of all places [illegible]." He [illegible] Bunyan's Pilgrim's Progress. [illegible] "It will afford [illegible] much fitting comfort in view of our pilgrimage [illegible]." While absorbed in the perusal of the book we came to a tobacco-field. The broad leaf and [illegible] presented a beautiful sight. It is a habit with us to admire tobacco, in whatever form it is, if it belongs to others. Even a single insignificant paper of cigarettes [illegible] affection, and we linger around its [illegible]. Oh, how economical and convenient [illegible] to have others furnish the [illegible]. It is worthy of admiration. Accustomed to [illegible] this admiration [illegible], we stopped and gazed upon the field, and [illegible] upon Howard [illegible]. With one hand he took me by the arm, with the other pointed at the tobacco-field. I waited. He pinched my ear and exclaimed, with intense earnestness: "I have found it!"

"Found what?" said I, [illegible]. And right here let me say that his discovery would set at rest forever that long and much-vexed question "The origin of the plug." [illegible] discovery.

"Found what?" repeated Howard, "why, don't you see that here is the birthplace of the plug? Every leaf that you observe is the material from which they are fashioned, every stem [illegible] that which will afflict us in the near future."

I could not drive away the conviction that forced itself upon me. "Here, then," thought I, "is the source of all our professional troubles! Here is born that object which is in every good operator's mouth—the plug!"

The subject afforded a bitter cud for us to chew upon as we retraced our footsteps back to the city. In it we found no solace; we discarded the subject as quickly as we could, and in *fine*, *cut* our thoughts away from it forever.

"Come, Ruddy," said Howard, "if you *choose* to give the subject a parting word, *spit it out!*"

"We'd better forget it," said I, and I walked along like a *Centaur*. RUDDY.

NEW LONDON, CONN., February, 1877.

* * *

A Slight Mistake.

"Paul Riverson, are you deaf or crazy? 'H' has been calling you for at least ten minutes, and here you sit like a stone and never make a move to answer."

Paul quickly placed his fingers on the key, saying, as he did so:

"Is that so? By Jove! I didn't notice that any one was calling me. Just step over here, Fred, and after I receive this message I'll tell you what makes me so absent-minded, for of course you have noticed that I am so."

Business was rather dull in X office that day, so Fred soon found time to go over to Riverson's table. As soon as he was seated his friend began:

"I believe, Fred, I've met my fate. You know I took a trip down to L. the other day. Well, while I was waiting for the train to leave, the operator came into the gentleman's room to bring a message to the station agent, and my heart was lost at once. She is loveliness personified. Talk about Hebe and Juno, and all the rest as much as you choose! I don't believe any of them could compare with my peerless little operator."

"Did you learn her name?" asked Fred, in an interested tone.

"Not then," was the answer, "but I have since. You see, Fred, I thought of nothing but her sweet face after I came back, and called her every time I could get the wire. She chatted very freely with me, and at last I sent her a letter, merely directing to telegraph office, as I did not know her name, but she answered the very next day, and signed Flossie Bates. Pretty name, isn't it? I imagined her name would be something like that. Well, since that I've written to her every morning and received an answer every evening. The last mail isn't opened until ten o'clock, and then I have to go nearly a mile out of my way to get my letter, but I'd rather walk a dozen miles than miss getting it. I told the postmaster not to send them to the office for the fellows might make remarks if they saw the same handwriting so often. You are the only person I have trusted with my secret, so mind you keep still, old fellow."

Just then Fred was called away, and Paul was left to dream of his charmer undisturbed, for the other operators were out to dinner.

The weeks passed rapidly away until two months had gone by since Paul first spoke with Miss Bates on the wire, when one morning he asked Fred Lawson if he could perform his (Paul's) duties for a day or two as well as his own, as he wished to visit L.

"What! Has it got as far along as that?" asked Fred in astonishment.

"Yes," answered Paul, "I have come to that pass when I must speak or die. I must know my fate. If she refuses, don't be surprised to find my name among the list of suicides."

A [illegible] could scarcely look more stylish than did Paul as he stepped off the train at L. His new seventy-five dollar suit fitted him to a charm, and the [illegible], who gave his ten dollar [illegible] understood his business. His [illegible] rested with jaunty grace on his [illegible] hair, and in his hand he carried a very pretty little cane.

The telegraph office door was opened in answer to Paul's very polite rap by a woman of about fifty, with a decidedly stout figure and a profusion of gray hair, the latter frizzed and puffed in every conceivable manner. She was dressed in a wine-colored dress, with many small blue bows in front, and a [illegible], the latter tied around a linen collar which came up high to the neck.

What was Paul's surprise when this person threw her arms around his neck and exclaimed:

"Paul, dear Paul, you have come at last! Oh, how impatiently I have waited for this hour!"

"There is some mistake, madame, I assure you," cried Paul, as soon as he could disengage himself from her embrace. He entered the office and sank down on a chair as he said:

"I came to see Miss Flossie Bates. Can you tell me where she can be found?"

There was a world of reproach in the woman's tone as she replied:

"Paul, I am Flossie Bates—your own Flossie, as you have so often called me in your letters."

"But I came to visit the operator," persisted Paul.

"And I am the operator," replied Miss Bates, with dignity.

"For heaven's sake, is there no other operator here?" frantically questioned Paul.

"And if there were, sir, I am the girl you have called at least a dozen times a day for nearly two months, and written to every day for more than four weeks, and after declaring so many times that you saw me when you were here before, and fell in love with my beautiful face, you now behave as if you had never set eyes upon me in the world."

Just then a lady passed by the window beside which Paul stood.

"There," he almost shouted, "that is the girl I came to see. Who is she?"

"That speaks volumes for you, young man," replied the [illegible] operator in a freezing tone. "It is a good sign in a man to be running after other men's wives."

"Is she *married?*" faintly asked Paul.

"Of course she's married. She's the station agent's wife."

Then he understood it all. The lady had been in Miss Bates' office on the day of his former visit to L., and had [illegible] the message which he saw in her hand to her husband.

Paul hardly knew how he reached home, and I will not try to tell you. He is now employed under an assumed name in a distant State. He never speaks to any one on the wire now unless the conversation is purely of a business nature, and he is often heard to declare that the best of people will sometimes make mistakes. L. A. C.

Getting Up a Club Under Difficulties.

I have at last come to the surface, panting and puffing like a race-horse after a four mile and repeat—hair pointing skyward and eyes popping out like a pair of billiard balls. But oh! what a fight I have had! Here are the names and cash of twenty yearly subscribers, including three for "Oakum P[illegible]." I've been two weeks laboring at it, when it should have been accomplished easily in two days. The quantity of blanks, envelopes, and ink I have consumed in the undertaking would make a stationery supply agent stare with wonder and amazement. If my worthy chief were aware of my experience in this direction, I would no doubt be compelled to submit to a "sliding scale" operation. I have performed hard and manual labor in my time, but I tell you candidly, Mr. Editor, that I would rather endure any other description of hardship than those pertaining to the task of soliciting subscriptions for a newspaper. Had I not entered into the undertaking with a strong and unconquerable determination, I should have abandoned it after making the first attempt. I had not the most remote idea that it would require such an amount of coaxing and persuasion. But armed with strong resolutions I fought bravely, and have come out victorious, with the exception of a few aggravating incidents which happened to me and mine during the skirmish. The first one I called upon for aid was my friend down town, and he caused me more grief than all the rest, and was the cause of giving me great discouragement on the start. He is quite a literary genius, and would rather talk of the Democratic political situation of the day than to eat a baked canary bird stuffed with elephant meat. I found my friend in his office perusing the columns of the morning paper. He was in the best of spirits and hilarity over the Democratic success in Louisiana. I smiled, thinking to myself that he would be an easy victim to capture. We conversed and exchanged ideas upon the various topics of the day, and to make myself "solid" with him I politely invited him out to have a cigar. He accepted the invitation and I treated (three for a half). While we were engaged in drawing the curling and fragrant smoke from our "Havanas," I drew from my pocket a specimen copy of THE OPERATOR, containing Oney's photo. I handed it to my friend for perusal and began a lively conversation, dilating upon the merits of the paper, the entertaining and instructive reading matter it contained, and the very low price of subscription. After examining it thoroughly, he handed it back to me with the remark that it was a neat and spicy little paper, and very ably managed. Ain't Oney Gagin and Nuf Ced two "bricks?" says I, and continued to waste my breath in trying to make a favorable impression. Our conversation ceased for a moment, for I was nearly out of breath, when the silence was broken by my striking a match to relight my cigar, at the same time saying, By the bye, I am engaged in getting up a club for this paper, and would be pleased to secure your patronage as a subscriber. He seemed to anticipate what was coming, and before I had really finished my sentence he had stooped to pick up the poker and began to stir up the fire with great energy, without making any reply. After he was through gouging the fire I waited, expecting some kind of a reply to my soliciting appeal, but when he spoke it was in regard to what I thought about the action that Governor Grover had taken in the Oregon-Cronin matter. I saw it was useless to press the subject any further to advantage, as I could not possibly get him interested in the object of my visit. I left disgusted and discouraged, bidding him good day, and wandered away thinking how foolish I had been to spend that silver four-bit piece for those fine cigars, when less expensive ones would have answered every purpose, and accomplished fully as much. The amount of breath I wasted upon that ungrateful being would have filled a gas tank. But I shall not be so foolish as to try the same experiment upon any one else, for life is too short to be wasting it away in such fruitless entreaties. I have come to the conclusion, after reflection, that the amount of persuasion I used upon that stingy wafter of the fluid electric was only becoming to a traveling book agent. I could have overlooked and forgotten the uncharitableness of my friend had nothing worse happened, but as I was retracing my footsteps to the office my fifty-dollar bird dog spied a neighboring Chinaman's yellow cat, and, dog like, chased it into a wood-pile, and then went prying and "nosing" around in search of it. Very suddenly I was startled by hearing an awful uproar, howling and yelping, and discovered my dog pawing the dust up into the air and raving like a mad bull. On making a quick start to see what the matter was I stumbled, precipitating myself headlong into three inches of dust, scooping the skin off my nose, bursting all the buttons off my clothes, destroying my paper collar, and breaking a pair of "cheap" suspenders. In falling I struck my head upon a large "boulder," which caused me to see seventy-five dollars' worth of Chinese fireworks in two seconds. After being able to gather myself up I looked around to see where I was, and could not distinguish whether it was Chinese New Year's or the Fourth of July. I limped up to that wood pile, where my dog was still howling and crazed with agony, and discovered on close examination that that infernal Chinaman's cat had actually put out his left eye. This was a sad calamity, and cost me a doctor's bill of two dollars and a half for buying arnica, court plaster, and eye water, which were necessary for healing the dog's and my own painful wounds. The wrath and condemnation which was fluently poured upon that Chinaman's cat, the crowd of spectators who witnessed the scene and heartily laughed at my embarrassing situation, and upon that pickaunish and stingy operator who wouldn't subscribe, will never be erased from the memories of those who heard it. On reaching my home Aunt Sue met me at the door with the exclamation of, "Great Goodness! Red,"—she calls me "Red" on account of my hair—"what in the world is the matter? Have you been drinking, or what? Just look at your clothes! Pretty sight, I must say. What on earth has happened?" She demanded an explanation, which was given, after which she remarked that she believed that men were the most awkward and clumsy beings on earth; that they would stumble and fall over a Palace Hotel. She, however, volunteered to bind up my bruises, sewed on the buttons, and bathed my poor dog's eye with linament. While she was sewing on the buttons I had a conversation with her, and almost emphatically swore that I would abandon the project of securing any more subscribers. But she is a great admirer of the paper, and is as anxious to receive each issue as a cat is to get into a crock of new milk, and when it arrives she monopolizes it until she has digested every item, including the "ads." She soothed my discouraged mind with words of great encouragement, and advised me to "never give up the ship." After Aunt Sue had finished the work of binding and plastering me together, I felt like a new man, but was an object for the eye of the critics next day when I appeared on the streets. I was hailed with such exclamations as "Hello, Red, who's been throwing you against a house?" "Oh, what a nose!" "Hello, Red, who hit you with a church?" and "I say, Cully, how's your dog?" accompanied with annoying bursts of "Ha, ha, ha's." These slurs pierced the deepest recesses of my nature, and I was compelled to use a great deal of adroitness and force of character to prevent my angry passions from rising. The next day I began my second attempt at securing subscribers. I went to the office, sat down and wrote letters to forty-three different operators, agents, and "plumes." I sat bent over a table, wrote letter after letter for an hour and a half, and when I attempted to rise from my seat I found that I was doubled up like a jack-knife, and felt as though a fifteen-ton steam hammer had sat down upon me. That night I had awful dreams and a severe attack of night-mare, and Percy, my room-mate, is circulating it around town that he was awakened in the night by hearing a noise and low tones of voice in the room. He says he struck a match and discovered me sitting at the washstand going through the motion of writing with his toothbrush, and appearing to be in great ecstacies over my work, and that he sat up in bed watching me for a moment and caught these words: "Would be pleased to have you join my club for THE OPERATOR. See 'ad' regarding the low price of subscription. The paper speaks for itself." He says I must either change my room or give up the subscription business. I think he prevaricates. The next morning I awoke feeling bodily as Rip Van Winkle did after his long sleep, but smiling at the thought of the "shin-plasters" that would come rolling in like "saw-logs" from the top of "Mount Diablo." I patiently waited four, five, six, seven days, and, as no replies came to my letters and solicitation, I again began to feel another spell of discouragment coming over me at not reaping any fruits from the seed I had planted. I went to Aunt Sue for sympathy and encouragement. She still advised me to be patient, saying that all human wisdom is contained in the three little words "wait and hope." I resolved to make the third and last effort, and on the next day used the wire as a mode of communicating my appeals for subscribers. I consumed every leisure moment that day in negotiating in winning tones for a dollar and a quarter from every fellow in immediate reach of me. But it was like drawing sorgum from a barrel in the dead of winter when the mercury stands at forty degrees below zero. Some would remit promptly and willingly, while some would allow the thought of it to stick in their souls like a plaster to a poor man's back. One youth, stationed in the rural districts of the sage-brush on being asked to become a subscriber for THE OPERATOR remarked, "It would be out of the question just now, as I have just subscribed for the *Police Gazette* and the *New York Varieties*. It occupies all my spare time to read them and took all my loose change to pay for them." Great Jehosephat! thought I, is it really possible that this young man can content his mind by reading such trash, and in such a desolate desert, and in such an advanced and learned age as this? I sincerely hope that my friend will learn to part with his hard earned dollars for a more beneficial and instructive supply of literature and science. But I will now tell you what my friend number three remarked when asked to become a subscriber and reader of THE OPERATOR. He said, "I have no time to read." "Mercy on me!" I exclaimed. "No time to read? How in this world do you manage to pass your time, and how can you possibly live without knowing what is transpiring throughout the world?" "Oh," he replied, "we amuse ourselves here by playing seven-up." "Ah, indeed. Must be very fascinating amusement," says I. "Well," says he, "it is all the kind of recreating amusement we have in this place, and what little spare time I have I generally take a hand in the game to relieve the monotony."

Is it possible that we are obliged to claim professional relationship with such so-called operators? It is a pity, and I am very sorry to know that my young and "ambitious" friend can condescend to live in a country of civilization and never divert his mind to study or the gaining of knowledge. Is it really possible that he will permit his mind to lead him to court and hanker after such trifling amusements in preference to cultivating a taste and desire for refinement, science, and art? How can he afford to throw the precious moments of his brilliant and youthful life away in such pursuits and pernicious dissipation? Such folly produces all the manifold evils and ignorance of which we see and hear of throughout the world, and is a stepping-stone to the pit of vice and crime. I say again that I am truly sorry to hear that my brother operator's taste flows in such a channel of foolishness, and to know that he can content himself by throwing his golden moments of leisure time away in idleness. Idleness breeds ignorance, and ignorance misery. When I reflect upon the unambitious ideas of my rustic friend, I deeply regret to know that he has no taste for the study of literature, science, art and nature in all their shining brilliancy, fascination, and splendor, and that the acquisition of learning is so sadly neglected by him. It may seem to him superfluous labor in attaining knowledge by diverting his mind to the reading of instructive books, history, and scientific journals. Without the glorious and noble field of literature which we possess to-day the faculties of the human mind would forever be unexercised and unopened, and the whole populace of the universe would linger in one vast whirlwind of uneasiness for the longing of food for the mind, and the world would become a sea of vile and vicious precepts. Literature is to the mind like rain and sunshine to the delicate flower. Without it we would grow up like a field of rank and worthless weeds, and our unwary minds would become calloused and poisoned.

But I have forgotten myself and wandered too far from the subject I started upon. To return to it, I would say I at last succeeded in obtaining out of the forty-three agents, "plumes," and operators whom I had appealed to, the number above mentioned. It was a rough and tumble fight, so to speak, and the most discouraging labor I think I ever performed. My Aunt Sue sends in her 1.25, being my twentieth and last subscriber. She says if she was an operator she would work her nails off to get up a club of twenty-five so as to get that premium you offer for that number. She has an eye to business.

"COIX."

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Toronto and Vicinity M. T. Notes.

There have been several changes in the Toronto office within the past few months. Mr. J. G. Scott has been appointed agent M. T. and Canadian Express Co's. at Oshawa, *vice* Mr. McLellan, resigned. Our little man, Billy Maguire, succeeds Mr. Scott on No. 11 wire. Thomas Winter, of the same office, has been appointed to fill the position rendered vacant by the resignation of Mr. Bryce as agent of the M. T. and American and Canandian Express Companies at Guelph. Mr. Thomas Mattchett, Jr., of the Branch office, "Y. 1," was taken ill some three months ago, but though still unable to resume his duties, is gradually improving, and hopes to be on hand again soon. Ransom (R.) attends at Y. 1 during Tom's absence. Mr. James B[illegible], who figured very prominently in the United States years ago, is with the M. T. Co. in Toronto. Jim is a good operator, and making lots of friends. W. Trickey turned up the other day, after an absence of two years. Guess blacksmithing did not pay. Mr. Griffis is on the sick list, but improving. E. Whiteside is subbing for him. Miss F. Moore, who did duty on No. 2 N. F. among the [illegible] for two or three years, got tired of telling them to adjust, and thought she would adjust herself by changing her name. All wish Fanny a happy [illegible] and much prosperity. Miss Crandall [illegible] stead. Miss Wynne, from Hamilton, has [illegible] for several of the Toronto ladies on different occasions. She rather likes Toronto. The Dominion House of Parliament opened last Thursday, and will make business a little more lively with us. Mr. J. H. Davis, agent at Pt. Perry, called on us a few days ago. J. is a nice boy, and very obliging over the wire. He is in the [illegible] business. [illegible]

THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

March 1st, 1877.

CONSIDERABLE matter is held over this issue for want of space. It will appear next issue.

SEE pages 12 and 13 for specimens of the engravings in the new book, "Lightning Flashes and Electric Dashes."

WE had the pleasure of a visit from Mr. George H. Bliss, General Manager of the Western Electric Manufacturing Company, yesterday, looking well.

AMONG other places THE OPERATOR is regularly on sale in this city at the corner of Broadway and Liberty Street, at the corner of Broadway and Fulton, in front of the Western Union Building.

WE would draw the attention of Mr. Talmage to an article "From a Poetic City Line Lady Operator," in another column. He will find enough "points" in it for his sermon to telegraphers, March 11.

WE have the pleasure of presenting our readers, this issue, with a portrait of Mr. Joseph Christie, the genial Warner. Mr. Christie is so well known as a graceful writer that we are sure all will be very glad to see his pleasant countenance.

THE following gentlemen have our thanks for favors, or, in other words, clubs: W. J. Courter, Camden, N. J.; L. O. McPherson, Keokuk, Iowa; Jas. Anderson, Buffalo, N. Y.; William C. Lewis, Boulder, Col.; George Judkins, Claremont, N. H.; George Le Rue, Springfield, O.; N. D. Webster, Toronto, Ont.; W. J. Walker, Montgomery, Ala.; C. M. Dechant, Reading, Pa., and others.

MESSRS. Partrick and Carter, of Philadelphia, have just issued a new and enlarged illustrated edition of their catalogue and price list. It contains many new specialties, including their Premium Learners' Outfit, Peerless Battery, Cut Out Lightning Arrester and Ground Switch, advertised in another part of this paper. Partrick and Carter are very enterprising, and seem determined to keep up with the times in the way of introducing new novelties in telegraphic apparatus. Send for their new price list, you will see something in it you want.

THE Anglo American Cable Company, finding that the United States Direct Cable was becoming a very formidable rival, recently made a determined but unsuccessful effort towards amalgamation. When this failed they reduced the tariff, probably for the purpose of bringing their rival to terms. Information was received in this city on Monday, that the Direct Cable Company had decided to reduce its rates to 25 cents a word between this country and England, beginning with March 1, thus making the rates the same as those announced by the Anglo American Company.

IMPORTANT ACTION OF THE A. AND P. DIRECTORS

The war between the A. and P. and Western Union Telegraph Companies has been renewed with increased vigor. At a meeting of the Board of Directors of the A. and P. Company on Monday last a final approval was given to the order providing for the construction of 10,000 miles of new lines, and immediate arrangements were ordered to be made for the supply of material and the carrying on of the work. Another sweeping reduction of rates was also decided, to take effect March 1st. The reduction extends the uniform rate hitherto in use throughout New England to cover all stations of the company in the States of New York, Pennsylvania, New Jersey, Delaware and Maryland, and interchangeably between all such stations and all stations of the A. and P. Company in New England, except such as are more than 500 miles distant from each other, where the rate will be thirty-five cents. It is understood that this will be followed by other reductions, until the rate is reduced to 25 cents for ten words between all important parts of the country east of the Rocky Mountains, and one dollar across the continent.

Mr. Orton, of the Western Union, says he cannot yet say definitely whether that company will meet the reduction of rates made by the A. and P. by a corresponding reduction in its schedule, but gives assurance that the company will defend its interest, and is prepared to maintain its position.

The recent more formidable rivalry of the A. & P. has had the effect of forcing down the price of Western Union stock in Wall Street. Western Union opened on Monday of last week at 69½, but by Saturday it had fallen to 63¼. During the early part of the present week the price has fallen still lower. The fact that Garrett declined to act as a director of the A. & P., however, partially stayed the downward progress of Western Union and had the effect of depressing the stock of its rival. On Tuesday Western Union closed at 65⅝ and A. & P., which had reached 21½ last week, at 19¾.

Mr. Orton professes to think that the building of lines, etc., by the A. & P. will not effect the old company much. The Western Union, he contends, is growing faster than its rival, and the relative difference between their facilities has been greater every year since the beginning. Mr. Orton illustrates the matter of the A. &. P. thinking to duplicate the Western Union lines in this fashion: "A person or firm has been in the nursery business for twenty-five years, and has on hand every variety of tree, shrub, and flowers of all ages, between one year and twenty-five. Such a one would not be likely to be very much alarmed at threats that his business was to be destroyed by a new man who had got unlimited prairie land and meant to provide himself with seed. There would always be twenty-five years between the two concerns." The gross receipts of the Western Union for the calendar year 1876 were more than ten million dollars, and the net profits nearly $3,500,000. The company is now doing business at 600 more offices than it did a year ago, and is constantly progressing. Mr. Orton does not, therefore, think it likely that the A. & P. will readily catch up with the old company. Mr. Orton does not believe that the A. & P. will get much ahead of the W. U. in the matter of building new lines either. The latter company has better facilities and, he was prepared to say, would build twice as many miles of wire during the coming season as the A. & P.

It can hardly be denied, however, that the A. & P. is proving a very formidable rival to the Western Union. As all efforts to absorb the company seems to have failed, the Western Union must simply secure business by studying the interests of the public and reducing rates when it is possible, without being forced to it by its rival.

Will the Telephone Supersede the Present System of Telegraphy?

The newspapers for several weeks have been full of reports of the wonders of the telephone. Our readers of course are aware that there are two systems. In another part of the paper we chronicle the sending of the "Ninety and Nine" over Elisha Gray's, and the singing of "The Last Rose of Summer" over Professor Bell's. We had the pleasure of witnessing an exhibition of both systems at the Centennial last fall. Professor Bell's was then literally in its infancy. In fact, it it could only speak in a very low whisper, the "baby" appearing to be ill. Recently, however, it has been very much developed. Prof. Bell, the inventor, lectured on the telephone at Salem, Mass., February 12th. The Morse telegraph alphabet was sent by musical sounds, and could be heard throughout the hall. The telephonic organ in Boston played "Should Auld Acquaintance be Forgot" and "Yankee Doodle," which were distinctly heard and heartily applauded. Mr. Watson, at Boston, next sung "Auld Lang Syne," and afterward made a speech as follows: "Ladies and Gentlemen: It gives me great pleasure to be able to address you this evening, although I am in Boston and you in Salem." This could be heard thirty-five feet distant; that is, all over the hall, and brought down the house, Mr. Watson distinctly hearing the applause. After the lecture a vote of thanks was tendered to Miss Molloy, A. & P. operator at Salem, for her assistance during the evening. A report of the lecture was subsequently transmitted to the Boston *Globe* by telephone, and appeared in that paper the following morning, being the first attempt that has ever been made to send a newspaper dispatch over the space of eighteen miles by the human voice. The time occupied was not much longer than would be consumed in an ordinary conversation between two persons in the same room. The conversation was carried on in an ordinary tone of voice.

The greatest distance that has been vanquished by the telephone is 143 miles, from Boston to North Conway, N. H. The most recent improvements made on the instrument do away with batteries altogether, and permanent magnets are now employed instead, the electric wave used in transmitting the sounds being generated by the voice itself. This is regarded as a very important step in advance, as the bother and expense of keeping batteries in order has been the great drawback to the employment of the instrument for private purposes.

"I haven't the slightest doubt," Mr. Watson remarked in conversation on the telephone in Boston last week, "that in a few months things will be so that a man can make a lecture here in Boston and be heard by an audience in any part of the country. We expect the telephone will eventually supersede the present system of telegraphy. A company is now forming for the purpose of manufacturing and introducing the instrument. In time it can't fail to replace the old dot and dash alphabet system entirely. We expect, at first, it will be used mostly on private lines and for city business. It will probably take the place of the present district telegraph companies and the like, as it will be especially convenient for that class of business. I suppose the receiving operators will have to learn shorthand. In our experiments we have generally paused after saying a sentence, so that the receiver had time to write out in long hand."

Mr. Watson thought that the introduction of the telephone would probably have the effect of increasing the telegraph business to such an extent that it would hasten the time when the wires would have to be laid underground instead of being strung on poles.

No trial has yet been made of the transmission of sounds to so great a distance as across the Atlantic. Mr. Watson said that as far as they had been able to ascertain, there seemed to be a limit to the distance over which the sounds could be made to travel; but he expressed himself as confident that in due time any given distance could be annihilated. "We have, in fact," he added, "talked through a wire arranged to give an artificial resistance equal to 40,000 ohms, which is more resistance than the entire length of the Atlantic Cable would offer. But there are other obstacles to be overcome in order to transmit the sound of the voice correctly to such a distance as that. Professor Bell and I are constantly at work here perfecting the system. When a favorable opportunity offers, we shall try and have a practical test over one of the trans-Atlantic cables."

The wonderful little instrument of whose future value to civilization the inventor is so sanguine, consists of a powerful compound permanent magnet, to the poles of which are attached ordinary telegraph coils of insulated wire. In front of the poles, surrounded by these coils of wire, is a diaphragm of iron. A mouthpiece, whose function is to converge the sound upon the diaphragm, substantially completes the arrangement. The operation of the instrument is thus described by Professor Bell: The motion of steel or iron in front of the poles of a magnet creates a current of electricity in coils surrounding the poles of the magnet, and the duration of this current of electricity coincides with the duration of the motion of the steel or iron moved or vibrated in the proximity of the magnet. When the human voice causes the diaphragm to vibrate, electrical undulations are induced in the coils around the magnets precisely similar to the undulations of the air produced by the voice. The coils are connected with the line wire, and the undulations induced in them travel through the wire, and passing through the coils of another instrument of similar construction at the other end of the line are again resolved into air undulations by the diaphragm of this instrument. The Voltaic battery is entirely dispensed with. The line wire may be of any given length, provided the insulation be good. Professor Bell further says that soft tones can be heard over the wires even more distinctly than loud utterances, even a whisper being audible.

Professor A. Graham Bell, the inventor of the telephone, is a native of Salem, Mass., and professor of "Vocal Physiology" in the Boston University. It is about five years since he first gave any attention to the matter of transmission of sound by telegraph, and he has since followed the matter up with much enthusiasm. We wonder he does not come to this city and exhibit his wonderful invention before a New York audience.

Lightning Flashes and Electric Dashes.

Since last issue we have put in type for the new book a very entertaining story by Mr. James D. Reid called "The Telegraph Dispatch, a Story of Telegraphy in the Early Days." Mr. Reid being a pioneer telegrapher and superintendent of the first line constructed in this country by private enterprise, his story will be found of very great interest to telegraphers. The story covers ten pages of the book, the page being very large—ten and a half inches by seven and a half. "A Perilous Courtship; or, Dangerous Telegraphy," by the author of "Was She Wrong?" "Poor Dick," by J. A. Clippinger (Samson), author of "The Pedagogue of Widows' Gulch." "An Autumn Episode," by L. A. C., author of "A Slight Mistake," published in this issue. "Scenes and Incidents in a Superintendent's Office," by Tracy Barnes, and a number of smaller articles have also been set. The genial Ruddy calls his story "The Vow of Six Operators." It covers a period of twenty-five years. Those who have seen the engravings for the book and read some of the stories are loud in their praise, and predict for the book an enormous sale. Believing that the sale will be large, we have put the price down to $1.50 a copy, although the first thousand copies will cost us considerably more than that sum. We hope, however, to make up the deficiency in subsequent editions. In another part of this paper we devote two pages to "Lightning Flashes," giving a samples of the cuts. Examine them carefully and draw the attention of your friends to the work. If you can get two others to join you, send $3.75 for three copies; if not, send $1.50 for one for yourself.

A Sermon to Telegraphers.

The Rev. T. DeWitt Talmage, of the Brooklyn Tabernacle, has been preaching special sermons for several Sundays to members of the different trades and professions. On Sunday, March 11th, he preaches to telegraphers, by request of Manager Hemmens, of the A. and P. All members of the profession in this city, Brooklyn, etc., who desire to attend will, by making themselves known to the ushers, be shown to seats in the middle aisle, specially reserved for members of the trade or profession to which the sermon of the day is addressed. We hope as many telegraphers as can possibly do so will attend this sermon, preached as it is for their especial benefit.

Echoes From 197.

The Philadelphia and Washington printing circuits have been supplied with the new Phelps motor. They are worked duplex, and occupy a table at the southeastern corner of the office. The Boston printers have not yet been supplied with the new instruments.

A change has taken place on the southern division; Catlin and Pearce have been added to it, and Messrs. Welch and Rector deployed as skirishers.

A platform has been erected in the operating room to test the safety of the ceiling which is cracked in some places.

Sam Bogart has withdrawn his patronage from the lunch room on account of not being promptly waited upon.

Messrs. Hutchinson, Brick, D. B. Brown, and Downier have been exchanging pictures with Messrs. W. Wallace, McRobie, Lester, and Day of Chicago. They will exchange visits as soon as the walking is good.

Night Manager Gould of the W. U. office, Cincinnati, is both an efficient telegrapher and a gentleman, two qualifications which make him extremely popular with our night force.

A number of operators repeat the word "collect" in the check of a message to guard against the yellow envelope business. The ladies put it down twice, which is a clumsy way of doing business.

Mr. L. C. Goodrich, formerly of Hackettstown, N. J., is now the regular Western Union operator in the Morris and Essex Railroad depot at [illegible] N. J.

The Mexican General [illegible] and ex-president Lerdo were shown through the main office on Tuesday of last week by Supt. Brown.

Themes for the Thoughtful.

Adversity is the best school of virtue.

As rust corrupts iron, so envy corrupts man.

Poverty falls heavy upon him only who esteems it a misfortune.

Adversity borrows its sharpest sting from our impatience.

Knowledge and timber should not be too much used until they are seasoned.

I envy no man that knows more than I do, but pity them that know less.

The ore is not visible on the face of the earth; intrinsic worth is deeply earthed.

As we are born to labor, so are others born to watch over us while we are working.

He who learns and makes no use of his learning is a beast of burden, with a load of books.

True praise is frequently the lot of the humble; false praise is always confined to the great.

Those who but off repentance to another day have a day more to repent of and a day less to repent in.

Ingratitude is of all crimes what in ourselves we count the most venial, in others the most unpardonable.

The happiest station is that which neither totally subjects a man to labor, nor totally exempts him from it.

He who is puffed up with the first gale of prosperity, will bend beneath the first blast of adversity.

Lenity will operate with greater force, in some cases, than rigor. It is, therefore, my wish to have my whole conduct distinguished by it.

Be as the little child who eats and sleeps and grows. God gives you the best nourishment, although not always the sweetest to the taste.

Many persons, after once they become learned, cease to be good; all other knowledge is hurtful to him who has not the science of honesty and good nature.

Every remarkable artist has become great through a sorrow; for happiness weakens the children of earth. We cannot endure eternal sunshine. We fade.

Leisure is time for doing something useful; this leisure the diligent man will obtain, but the lazy man never; so that, as Poor Richard says, a life of leisure and a life of laziness are two things.

Don't you think of knocking out another person's brains because he differs in opinion with you. It will be as rational to knock yourself on the head because you differ with yourself ten years ago.

No man's life is free from struggles and mortification, not even the happiest; but every one may build up his own happiness by seeking mental pleasures, and thus making himself independent of outward fortune.

The mind of the greatest man in the world is not so independent but that he may be subject to become troubled by any petty tumult that is made around him. It need not be the [illegible] of a cannon to disturb his thoughts; it needs only be the noise of a weathercock or pulley.

No man's spirits were ever hurt by doing his duty; on the contrary, one good action, one temptation resisted and overcome, one sacrifice of desire or interest, purely for conscience' sake, will prove a cordial for weak and low spirits, far beyond what either indulgence or diversion or company can do for them.

Begin to [illegible] the heart not with the cultivation of noble propensities, but with the cutting away of those that are evil. When [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible]. The [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

The "Ninety and Nine" by Telegraph

A telegraph operator at [illegible], Ill., the other night was frightened almost out of his wits by hearing the "sweet-set tuned" play "Ninety and Nine." When capable of thinking—for astonishment completely paralyzed him for a moment—he concluded that Sankey was sitting on the top of a pole somewhere along the line sending a message to the stray sheep to come into the fold. Another person seated in his room at Highwood heard the music at the same time, but he was not at all alarmed; gratification expressed his state of mind. This was Mr. C. H. Sommers, electrician of the Western Union Company. Before him on a table was a small box nearly square, with a receiver and wire attached. Seventy miles away, in Milwaukee, the opera-house was crowded with people assembled to listen to the lecture of C. H. Haskins on electricity. They also heard the hymn, and saw the box, and the magnet, and the wire, and were beside themselves with delight at the triumph of science.

The one directly responsible for the fright of the operator, the gratification of Mr. Sommers, and the setting of Milwaukee by the ears, is Mr. Elisha Gray, the inventor of the telephone, and the gentleman who was manipulating the instrument was Mr. W. M. Goodridge, who was at the office of the Western Union Telegraph Company in Chicago.

Mr. Gray, in connection with Mr. Goodridge, has been hard at work since 1873 developing the telephone, and he has made such progress as to secure the accomplishment of his object—the sending of eight messages over one wire at the same time. The musical feature, not as yet developed to its full extent, is simply a novelty—evidence of what can be done. What may come out of it Mr. Gray does not know, since the instrument is capable of elaboration. Already, though the telephone as at present constructed is not specially adapted for it, harmony can be sent as well as melody.

The invention may be said to consist of three parts; one is transmission of simple melody, which is received upon a sounder; similar is the transmission of either, or chords of discords—composite tones—which can be received on a single instrument; and the third is received on instruments that analyze the tones and pick out the one to which each instrument is attuned. This is the valuable feature—the ability to transmit composite tones simultaneously, each tone passing over the wire at a certain vibration and preserving its individuality at the receiving end, and thus enabling the company to send the note which the "box" is designed to receive.

The sending instrument, if the term is permissible, is virtually an electric organ. It consists of reeds made of steel, tuned in the ordinary way to the musical scale, and these reeds are kept in vibration by means of galvanic batteries. When the operator begins to play on the keys, the whole series of reeds are started and begin vibrating, and the noise made is deafening when the doors of the organ are open. A green baize covering to the organ deadens the sound when they are shut, and nothing can be heard. The keys close the main circuit through these corresponding reeds, and sound the notes which contain the tone. The instruments now in use have sixteen notes, and any tunes can be played that come within that compass. It is unlike any musical instrument, except as to the opening of the reeds.

The receiver is a magnet, a large one for a low note and a small one for a high note, varying in size from eight inches long by four inches wide to [illegible] and a quarter. On the top [illegible], in which are attached the "in" and "out" wires. The armature material on the magnet is fixed rigidly at one end and is made to vibrate in front of the other pole. The magnet will give off any tone, but the box which is attuned to the particular sender will take the note and amplify it. The principle, in Mr. Gray's words, is this:

If I send a sound along a line which vibrates 128 times a second, and at the other end put a box which is adjusted to that note, so that if excited mechanically it will produce that note, it will pick up the note as it comes from the wire and respond to it and to no other rate of vibration. If two messages are to be sent, another transmitter can be put in, tuned to the rate of 300 vibrations, and at the other end a receiver corresponding to it. Thus you can multiply transmitters and receivers almost indefinitely. A tone with 300 goes to A box, and B tone to B box, etc. Theoretically, we are limited only by the number of distinct notes that can be received. Practically, we do not know what the limit will be. Sixteen tones have been sent—more than will probably ever be necessary on any one line. The fine adjustment of the instrument required will be apt to limit the number. Eight messages for a long time will perhaps be the maximum sent and received at one time. We are now experimenting with a view of equipping a line between here and Buffalo.

Any electrical magnet will receive a tone. In the box-receivers the loudness of the tones depends upon the strength of the battery used, and the method of mounting so as to get the best acoustic effects. Thursday afternoon an experiment was made with the largest box yet constructed, and "How Can I Leave You?" and other melodies sounded as it played on a violoncello. The notes were not characterized by the delicacy and sweetness peculiar to that instrument, being coarse and harsh, yet the tunes were readily recognized.

Mr. Gray is now at work on an instrument designed to make every tone print a letter. If "A" is sent, "A" will be printed at the receiving end. Analysis of sound is the chief principle. When completed, these printers will supersede the commercial instruments now in use, since they will be much more rapid and available for long lines.

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The Future of Telegraphy.

Some idea of what the science of telegraphy will be in its maturity may be gathered from the marvelous strides it has made in recent times. Last November, in testing Professor Bell's method of conversing by telegraph, it was found that words spoken at Boston were audible at North Conway, a distance of 143 miles. Happening to glance at the pages of *The Photographic News* of July, 1859, recently, we found that Bell's remarkable discovery had been equaled in marvelousness, if not in practicability, by Mr. M. L. Scott, who, at that comparatively early date, had devised a means by which sounds, vocal or instrumental, could be made to record themselves on paper. The mark produced on paper by a particular note was always the same, and the varying tones of the human voice were faithfully recorded in every instance. These results were verified by Professor Wheatstone and the Abbé Moigno, who tested Mr. Scott's apparatus. Nevertheless, the sanguine inventor has hitherto failed to realize his aspiration to report a speech in the language and *accent* of the speaker. It remains for a third discoverer to combine the discoveries of Scott and Bell, and electrify the age.

And now an ingenious Parisian has found out how to send portraits by telegraph. The nature of his contrivance and its way of working are jealously kept secret, but, if we are to believe the French papers, it has proved a complete success. A trial of it was made by the police. The likeness of a Lyons official, we are told, was forwarded from Paris by the new telegraphic apparatus, and at once recognized. In return the Lyons authorities telegraphed to Paris the portrait of an absconding clerk, thanks to which the Paris police were enabled to arrest the delinquent on his alighting from the train. These facts are published, seemingly, on the very best authority, and, strange as they may seem, are probably true.

If this should be the case, the police authorities will never be allowed to monopolize so valuable a discovery—it will be too important to the world at large. Supplemented by Professor Bell's telephonic invention and Scott's apparatus for transmitting tones, it would revolutionize society. Congressional committees could then hold their investigations by sight, ascertaining from his looks and accent that the proper witness was not answering by proxy. Matrimonial agencies could arrange personal interviews between connubial aspirants, at which they could judge of each other's grammar, pronunciation, and complexion. Every owner of a private wire could see the play from his own fireside, and the audience of a favorite performer might be scattered over two or three continents. As telephonic knowledge progressed, Bob Ingersoll or Sunset Cox would be able to address admiring audiences in all the chief cities of the Union on the eves of presidential elections or other momentous occasions. And, doubtless, in the course of time some photographer, with his improved process, would intrude upon the strict privacy of the sea-serpent and photograph him in his own home by means of an ocean cable.—*New York Illustrated Weekly*.

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The electric light is becoming common in Paris in connection with works that have to be carried on during the night. A large lamp has been established in the Avenue de l'Opera, and others are employed in the Trocadero, in connection with the building of the Exhibition Palace.

St Louis, Mo., Items.

It is a long time since you have had a scribble from this future great city. The Chicago ball has awakened a few of us to a sense of our inactivity, and I will now try and send you a few remarks about the sayings and doings of the mound city. Very few knights of the key and lunch counter from here attended the Chicago telegraphers ball, but those who did were very much pleased with the gentlemanly manner in which they were treated by their brother operators of Chicago, and sincerely hope they will regularly hold their annual reception until Gabriel shall blow his horn over that beautiful city.

St. Charles, Mo., sent her representative to the Chicago ball in the person of C. A. Tripp. He never will forget that "trip" to Chicago *via* St. Louis. He took in the sight-seeings of St. Louis and Chicago with something more than ordinary curiosity, but Chicago was too much for him, and he found himself on the train homeward bound the next morning after the ball with but five cents in his vest pocket. He exchanged with a newsdealer for a *Times*, in which he read a glowing account of the ball and slept the sleep of innocence, dreaming of waltzes and the light fantastic till the train arrived at Bloomington where it stopped ten minutes for refreshments. But, alas, his sweet dreams were soon to be broken. His companions went to dinner and did not notice that the gentleman from St. Charles wasn't present till the conductor announced "All aboard!" Bob Irwin rushed on the train and asked Mr. Tripp why he had not gone to dinner. The reply was, "Well, I hain't got any money or I would." "Why didn't you say so," replied Irwin. "Here is some filthy lucre, go and get something to eat, you will have lots of time, the train will be here for five minutes yet." The representative from St. Charles had no sooner got into the dining room than the train moved slowly away. He was informed by the waiter that the train had started. He made a rush for the door with a pie in one hand and two pounds of hot sausages in the other. But accidents will happen. The pie slipped from his hand, and, curious to relate, although there was no banana skin in that pie he slipped from the platform all the same. Some of the passengers wanted to bet he could outrun the train, while others remarked that he would have to be "trained" for it first. It is hard to say how it would have ended had not one of the passengers pulled the rope and stopped the train. But when St. Charles arrived he was so much out of breath that he had to be assisted on board. His first words when he was able to speak were that he wouldn't have cared a cent had he not lost his white necktie.

The Western Union are having their office painted and grained from cellar to dome and putting new floors in the operating, book-keeping, and C. N. D. rooms. To be in the latest fashion, they have blue glass windows around the counter in the receiver's department on the first floor.

Jim Murray is looking for a furnished room with blue glass windows. Dick Hollihan is going to have his rush copy lithographed and sent to THE OPERATOR with his photograph to be published in your first of April issue. J. H. French says he is going to give the boys an oyster supper when he receives those rejected oysters from New York, and if he doesn't get them he won't pay that $50 bill. Charley Cloud is going to furnish fifty dollars worth of bacon for the occasion. Billy McDonald would have gone to the Chicago ball, but he soiled his dress pants a few days before while moving from boarding house life to housekeeping. Mack moves only once a week.

The Western Union operating force at present consists of W. W. Cummings, chief operator, John Topliff, assistant chief operator, A. E. Van Tyne, electrician.

DAY FORCE.

J. W. Cooke, T. P. Cooke, Ed Parmalee, Geo. W. Huddleston, James Nelson, Robert Garliche, J. W. French, Charles Snyder, Moike Tully, William Fay, Joseph McIlvaine, Fatty Eckert, Marc Gautier, Paul Murphy, Thomas Dunn, Geo. King, Samuel Shaw, Miss Belle Wise, Miss Lillie Shields, Miss Emma Gether.

NIGHT FORCE.

Sid. B. Fairchild, Thomas P. Wheeler, James Murray, R. W. Irwin, J. W. McDonald, A. R. Pippitt, William Manley, Charles Cloud, I. H. Bird, J. H. French, L. K. Hutchison, Richard Hollihan, M. Hollihan, W. Burroughs, Joseph Purcell, John F. McCabe, T. H. Herbel, R. S. Saunders.

All night man.—Herr Peter Gricocikoffoult.

The A. & P. force are made up of Charles Hammond, manager. Operators, Geo. Millar, Luke Fisher, Harry Eckert, Geo. McGann.

Hank Cowan resigned his position a few days ago and accepted a clerkship in the St. Clair Hotel. Ed. Foote, formerly of Memphis, Tenn., passed through here a few weeks ago to accept a position with the A. & P. at Chicago.

Frank Farley also walked through here and is now with the A. & P. at Chicago. FRITZ.

Eastern Division M. C. R. R. Items.

I wish to introduce to the many readers of THE OPERATOR the sparky electricians on the Eastern Division of M. C. R. R. Detroit to Jackson constitutes this division, over which about forty trains run daily, making it exceeding warm for the boys. In Detroit "F" office I have the pleasure of introducing brothers Joe, whose surname is Peterson, and Fitzsimmons, whose given name is Mark—both gentlemen affable in manner and pleasing to look upon. It has been said that Mark is the fastest sender on the line.

Grand Trunk Junction comes next, and there we find Charlie Williams monarch of all he surveys, with lots of work to attend to. Charley always appears happy. I suppose it's because he has a lovely little wife to cheer him as he meanders down the stream of life. Dearbourn, of a necessity, follows, but the poor fellow there does so little telegraphing I have never heard his name. Mr. Crosby is manager at Wayne—a man fond of sport and frolic. At Ypsilanti Fred Bradley whiles away his spare moments playing the guitar, being quite an adept. He's a comical genius—kind of an "only and original." Geddes is honored with Mr. Peterson. Dean Fleming manages tickets and operating at Ann Arbor. Dean's hair is quite white, not with the frost of many winters, however, for he has only been immurred in about eighteen summers. At Delhi friend Crissy signs "So," and nothing preventing we all expect it will be "So" for a long time to come. Dexter has had many changes lately, but the extra man, George Goodenow, is permanently located there now, and will probably make it his abode at least for a time. At Chelsea, Colonel Schnaitman holds forth; he is our "side show" on the string. His writing defies imitation; am not positive, but will venture to say that he writes with his left foot. By the way, he also enjoys connubial felicity, and has a little "sounder." Francisco is favored with the renowned "Shake" Malcom Duffie, in his Dutch productions. In his appearance at his office door he wears, or used to wear, a plug hat made of stove-pipe—his own manufacture. It is almost needless to add he is a married man. H. Palmer attends to the duties of Grass Lake office—a quiet, steady man, and also married. We pass on to Governor Henderson, who holds mighty sway at Leoni. Green and fresh in his young days, he regards not the withering of the vigor of youth nor the gray hairs of old age. Jackson Junction has three operators, Mr. Dickey, manager, and Messrs. Fuller and Cassidy assistants—all "white" boys. This concludes the Eastern Division, except the dispatcher's office at Jackson. ZEO.

From C. & W. Branch P. & R. R. R.

Nuf Ced, Werner, and others are not aware that between E. M. Junction and Williamsport, running through the most beautiful mountain scenery in Pennsylvania, can be found the C. & W. Branch telegraph line of the P. R. & P. Tel. Co, manipulated by proficients and plugs. Unhappily I am one of the latter, and rank as an "owl." It is the universal belief that we "owls" experience more discomfort than any other class of laborers. But interwoven with trials and hardships there exists a certain amount of pleasure; for instance: reporting nineteen every half hour, and when we fail, to be reminded that the usual fine of two dollars has been imposed. Verily the way of the transgressor is hard. Some of our lightning men possess all the eccentricities of a man with the gout, always in a bad humor and never ready to give a civil answer. Our friend, Ellis, agent at Danville, who worked the key for several years, has been blest with a son first edition; weight twelve pounds. It is hoped that the young operator will be a credit to the profession, and we feel sure that "Z" will endeavor to make him such.

One of the best editorials ever appearing in THE OPERATOR comes forth in January 1st number, entitled, "Conduct Over the Wire." I would like to see a dozen copies of this article circulated over this string, and feel assured that it would have the effect of converting several of our bull dozing operators. Hoping that in time to come your valuable paper may be found on every operator's table. JIT.

The Chicago Telegraphers' Ball.

It is conceded on all sides that the Telegraphers' Reception was the par excellence society affair of the season. Everything that could in any way conduce to the success of the undertaking was done. There was no bustle, except that kind of which we dare not speak, and no confusion but that of nimble-footed ladies and gents as they "tripped the light fantastic toe" in the mazy rounds of "the dreamy waltz." Those who were so fortunate as to have invitations began arriving with their friends as early as eight o'clock. The reception committee were on hand "bright and early," and did everything in their power to make visitors from abroad feel at home. Dancing began promptly at nine P. M., and certainly Prof. Pound's orchestra of twelve pieces never discoursed sweeter or better music than they did on that occasion. The floor was like a skating park, so smooth and bright that it reflected almost perfect pictures of the gay throng moving to and fro over its surface. About the dresses—we dare not venture upon a topic which might be fraught with utter destruction to your correspondent did he fail to do the subject justice, and to overdraw the picture of loveliness would be simply impossible. Of course we are speaking of the ladies now. If there are any homely telegraphers' wives, sisters, or sweethearts, they must have staid at home—we couldn't see any; all were pretty, all were nicely dressed, and like the boy at his first party, we wanted to kiss all of them.

As to the gentlemen, the usual complement of "clawhammer" coats, white vests and ties, and lavender kids made them all fine looking, of course. The florists were extensively patronized. Flowers in the hair and on the dresses of the ladies, in the button-holes of the gents' coats, and all over the room in every convenient spot, made the air rendolent with their sweet perfume.

I will not burden you with a list of the committees, as they were given very nearly correct in your last issue. The names of two members of the floor committee, A. Shillinglaw and W. C. Long were ommitted from the invitations by mistake of the printer, but appeared on the programmes. The floor committee deserve great credit for the manner in which they performed their duties, several of them sending their ladies to supper with other gentlemen and remaining on the floor until every lady who desired to go to supper was furnished with an escort. No one who wanted to dance had to ask a floor manager but once for a partner. The executive committee and committee of arrangements were careful that every lady telegrapher who might come was provided a carriage and suitable escort. Especially was this the case with those who were not well enough acquainted with gentlemen in the city to have escorts of their own. These ladies are loud in their praises of the manner in which the committees did their work. The morning dailies complimented us very highly, although they did get some of the names terribly mixed and a number of the telegraphers' names omitted.

Greetings were received by telegraph during the evening from all the adjacent important towns and cities and from many of the most prominent men of the country. It would occupy too much space to give them all. The following from Hon. Schuyler Colfax, which was very appropriate, I give you complete:

SOUTH BEND, Ind., Feb. 12.

To the Chicago Telegraphers' Annual Reception:

Success and best wishes to those who daily answer that prophetic question God asked out of the whirlwind of the man of Uz: "Canst thou send lightnings that they may go and say unto them, here we are?" and may they in their lives emulate the life and character of that large hearted patriot whose birthday they are celebrating, summed up in his golden words: "With malice towards none, with charity for all."

Our New York brethren sent us the following, which for its appropriateness was not behind the Hon. Ex Vice President's, and was as heartily received, as the answer to it will show:

NEW YORK, Feb. 12.

CHICAGO TELEGRAPHERS' ASSOCIATION:

On speed the flying feet,
On with the merry dance;
May joy be felt complete,
And dulcet strains entrance.
We greet you, brethren, all
O'er the electric wire,
Success unto your ball
Is our sincere desire.

NEW YORK TELEGRAPHERS.

(REPLY.)

CHICAGO, Midnight, Feb. 12.

NEW YORK TELEGRAPHERS:

The wires flash your words of cheer
To the fraternity assembled here,
Whose happy hearts respond in tone
With music by the telephone.
Brothers, we greet you;
In thought we meet you;
Upward and onward, strong for the right,
Excelsior our motto—Good night, good night.

The following reply was also sent to Ex-Vice-President, Colfax:

CHICAGO, Midnight, Feb. 12.

HON. SCHUYLER COLFAX, SOUTH BEND, IND.

We put the girdle of your pleasant words around our hearts to-night. CHICAGO TELEGRAPHERS.

Our own dear night force did not forget us, as the following will show. We were so visibly affected with the truth of their remarks, and thankful that they were there and we where we were, that we replied not:

CHICAGO, 10:30 P. M.

OUR BRETHREN AT THE BALL:

We hope the information that we are getting horribly roasted will not detract from your enjoyment in the least. In the midst of that scene of pure delight enlivened by the presence of youth and beauty, while floating in the dreamy waltz with the delightful prospect of a sumptuous feast before you, pray do not let your thoughts stray to us miserable wretches, whose only music is that of the "sounder," whose dreamy waltz is danced with a key for a partner; whose sumptuous repast exists but in the imagination. But be assured that though separated from, our hearts are with you; and long after we have sought rest from the night's labor, waking visions will obtrude themselves upon our minds of the feminine loveliness, the soft odor of the flowers, the gay music, and the merry laughter of that throng of happy dancers at the Telegraphers' fourth annual reception. THE NIGHT FORCE.

The St. Louis *Globe-Democrat* had a special of half a column sent them, which they published the next morning, showing what they thought of us. I append the first part of it, which is as follows:

(Special dispatch to the Globe-Democrat.)

MARTINES' BALL-ROOM, CHICAGO, Ill., Feb. 12.

The Telegraphers' reception to-night is a brilliant success in every particular. Over 150 couple are on the floor, and dancing among them are visitors from nearly every large city in the Union. The hall has been tastefully decorated, and the music is bewitching. The St. Louis delegation comprises some of the handsomest and best telegraph operators in the ball room. They are all swallow-tailed, kid gloved, and perfumed to kill.

The "Telephone Waltz," composed by Mr. Fred. Root, was played from Milwaukee about 10 P. M., and was the wonder of almost every one present as to how it was done. It was not loud enough, however, to dance by, although several couples did, for the name of the thing, waltz to its music. The orchestra waited for it, but finding it was not going to play up any louder they struck up, and nothing was heard but a slight buzzing sound from the telephone in the ball room. What it played for other ears we were utterly oblivious to. Several unsuccessful attempts were made afterwards, but the orchestra drowned it out, and we heard no more of it. At midnight the repast was served in the rooms below, and was a feast fit for the gods (if they feast), and ample justice was done to it by the hungry dancers. It was one of Eckardt's best, and there was a plenty of everything.

Among the notables present were Gen. Anson Stager, Vice President and General Superintendent Western Union Telegraph Company; Judge Caton, Norman Williams, General Solicitor Western Union Telegraph Company; F. B. Chandler, late Superintendent Chicago Fire Alarm Telegraph Company; Matt Benner, Chief Marshal Chicago Fire Department; Captain Bullwinkle, of the Insurance Fire Patrol; Prof. [illegible], Dr. and Mrs. A. E. Hoadley, and a number of others not connected with telegraphy. Among the noted telegraphers of this city there were present Mr. Parker of Col. Wilson's office; Manager Maynard, Assistant Manager Jones, Manager Fallon. Chief operators Plum and wife, Kelsey and wife, Pettit and wife, Whitford and wife, of the W. U.; Manager Knapp and chief operator Moore and wife, of the Board of Trade; Chief O. H. Fibes, of the Illinois Central; S. L. Whipple, Chicago and Alton Railroad; and F. A. McCrory, Manager Alton District, and wife. Other cities and towns were represented as follows: St. Louis, George W. Keene, G. W. Haddleton and wife, Joseph [illegible], E. Irwin, A. K. Minor, Miss Gunther, George F. Miller, John S. Manchester, George Payne, F. F. Dunn; St. Charles, Mo., C. A. Tripp; St. Paul, Minn., A. Carpenter; Cincinnati, A. L. Keller and wife, C. F. Beals and wife, L. D. Hamilton and wife, and L. D. Gleason; Bloomington, Ill., E. F. Williams and A. T. McElhaney; Galena, Ill., Mr. Batchelor; Warren, Ill., S. H. Stafford; Darlington, Wis., E. R. Summers and H. W. Goddard; Springfield, Ill., T. J. Gwynn, Charles Smith, F. D. Wilson and F. P. Wiley; Aurora, Ill., Chas. Clay; South Bend, F. C. Brown; Peoria, Ill., Geo. C. Cassidy; and Milwaukee by Mr. Russell and C. A. K[illegible] and wife. The lady telegraphers from Chicago present were Mrs. Tillotson and Mrs. Potter, and Misses Russell, Fox, Burbank, Delany, Misgrove, Kate Stennway and Griffey, of the Western Union, and Miss Patten, of the Stat Union Line office, and her sister. The telegraphers [illegible] present from Chicago were Misses Allie and Carrie Kelley, and Miss M. E. Holligan.

The Chicago W. U. telegraphers present were J. L. Martin and wife, James Houlihan and wife, Henry Fenn, wife and sister, W. C. Long and wife, J. J. Armstrong, wife and sister, D. C. Reeves and wife, A. J. Kelly and wife, Chas. T. Day and wife, D. T. Francis and wife, J. McCollford, of the U. S. Signal Service, and wife, Ed. Bell, of the W. U. Book-keeping Department, and lady, and Messrs. W. R. Holligan, Horace Crew, A. W. Beidler, S. O. Blanken, Beller, C. O. Andrews, George N. Willis, D. L. Watson, Andy Shillington, John Keaton, W. L. Browne, Harry Whallon, H. S. Kline, Austin, and W. A. O'Connor and others; also Mr. Charlie Robinson, Mr. M. C. Huyck of the Board of Trade Company, and Mr. C. H. S. Whipple, of the C. & A. RR. This is, of course, only the telegraphers. The A. & P., although they had numerous invitations, were not represented at all. General Stager expressed himself highly pleased with the ball, and pronounced it a creditable affair; he was introduced to all the telegraphers and their wives and was surprised to find so many of his boys and girls on hand. The dancing was kept up until the programme of eighteen dances was exhausted, when at 4 A. M. the orchestra played "Home, Sweet Home," and all sought their respective abodes, satisfied that they had enjoyed one of the most pleasant parties of the season.

The Chicago Electrical Society held a very interesting meeting at the room of the W. U. Operators, No. 24, fourth floor, Western Union Building, on the 15th. The programme consisted of three pieces of music, between which Mr. F. W. Jones delivered a very fine lecture on "Electro Force," and illustrated his remarks by some very beautiful experiments, and W. C. Long read a ten-minute paper on "The Education of Telegraphers," which was discussed in three minute speeches by the other members. The Telephone of Professor Elisha Gray is to be exhibited at McCormick's Hall next Tuesday night, under the auspices of the American Electrical Society, the parent society of America. Mr. George Hamilton, of the W. U. Electrician's office, New York, is in the city, experimenting on a quad [illegible] between here and New York on the W. U. wires. I understand it is the Edison, with Gerritt Smith's and Mr. Prescott's improvements, and possibly some of Mr. F. W. Jones'. It appears to work quite well so far.

OCCASIONAL.

* * *

An American District Telegraph boy lost checks in Wall Street on Monday to the amount of $28,140 00. The checks were all registered and [illegible] deposit, so that they cannot be used except by the owner.

"The Last Rose of Summer" Sung by Telegraph

The Boston *Transcript* says: "A distinguished party of gentlemen assembled at the office of the Boston Rubber Shoe Company on Congress Street, in order to witness a series of experiments performed on the telephone between the inventor, Prof. A. Graham Bell here, and his associate, Thomas A. Watson, at the residence of Mr. Converse at Malden, about six miles distant. The telephone, in its present form, consists of a powerful compound, permanent magnet, to the poles of which are attached ordinary telegraph coils of insulated wire. In front of the poles, surrounded by these coils of wire, is placed a diaphragm of iron. A mouthpiece to converge the sound upon this diaphragm substantially completes the arrangement. As is well known, the motion of steel or iron in front of the poles of a magnet creates a current of electricity in coils surrounding the poles of the magnet, and the duration of this current of electricity coincides with the duration of the motion of the steel or iron vibrated in the proximity of the magnet. When the human voice causes the diaphragm to vibrate, electrical undulations are induced in the coils environing the magnets precisely analogous to the undulations of the air produced by that voice. These coils are connected with the line wire, which may be of any length, provided the insulation be good. The undulations which are induced in these coils travel through the line wire, and passing through the coils of an instrument of precisely similar construction at the distant station are again involved into air undulations by the diaphragm of this instrument. The simplicity of Prof. Bell's system will be apparent when it is known that the Voltaic battery is entirely dispensed with. All that is required for communicating between the most distant points are the instruments and the telegraph wire, the latter taking the place of the speaking tube, and the former that of the mouthpiece. The short distance which separated Messrs. Bell and Watson in their experiments yesterday must by no means be considered a gauge of the powers of the instrument, as any effect produced by electricity over a short wire can with equal facility be produced over one extending 100, or, for that matter, 1,000 miles, provided, of course, that the insulation be good. In fact, the inventors have already conversed through an artificial resistance far exceeding that of any of the Atlantic cables. Telephones having been connected with the private telegraphic line of the Boston Rubber Shoe Company, and the operators at either end having taken up their station, conversation was at once commenced. Stationed at the Boston end of the wire, Professor Bell requested Mr. Watson to speak in loud tones, with a view of enabling the entire company at once to distinguish the sounds. This was so successful that a smile of mingled pleasure and surprise played on the features of those present. That it, however, might not be supposed that loud speaking was essential to intelligibility, Mr Bell explained that soft tones could be heard across the wires even more distinctly than loud utterances, even a whisper being audible. In confirmation of this statement, Mr. Watson commenced speaking in turn with each member of the company, and after the efficiency of this method had been proved to the satisfaction of all, he took up a newspaper and informed the assemblage that gold had closed the previous evening at New York at 105 [illegible]. As there were quite a number of business men present, the effect that this practical demonstration of the value of the telephone produced can scarcely be exaggerated. Other passages from the daily journals were then given, and by this time the desire for conversation having become general, Mr. Watson was plied with questions such as "Is it thawing or freezing at Malden?" "Who will be the next President?" etc. It was remarkable that Mr. Watson was able to distinguish between the voices at the Boston end, calling at least one gentleman by name as soon as the latter commenced speaking. This went on for some time, until a lady at the Malden end sent the company an invitation to lunch per telephone, and an appropriate response was made by the same medium. At length the company were requested to remain quiet while a lady at the other end conveyed to them the sweet strains of music. The assemblage thereupon listened with rapt attention while a young lady commenced singing "The Last Rose of Summer." The effect was simply charming. Possessing as the fair cantatrice does a voice of exquisite sweetness, the sounds penetrated into the Boston end of the telephone with a distinctness equal to that attainable in the most distant parts of a large concert room, and a unanimous vote of thanks was sent by the handy little instrument which had procured for the assemblage so agreeable an hour.

* * *

Mississippi Division N. O. St. L. & C. R. R.

Lew M. Pennington has been recently appointed train dispatcher of this division. Lew has been in the T. D. office for over two years, part of the time as assistant days and for a long time night dispatcher. His appointment is gladly welcomed by all, for he is a jolly good fellow as well as a good operator. He is ably assisted days by Ed Whitaker. Lon Pennington, Lew's brother, moves trains nights. Lon has been with us but a short time, but has made a host of friends among the ops. At Canton Mr. C. St. John holds forth. He is a veteran in the service, and one of the best operators in this part of the country, and as a gentleman can't be beat. At Vaughans J. Wiley acts as agent and operator. At Pickens, Mr. Rose ditto; at Goodman we find Brother Smith, one of the oldest operators in the United States. Mr. S. has been telegraphing for twenty-five years, and worked some of the first offices ever opened in Mississippi. He may have seen the day when he could send forty-five or even sixty words per minute, but alas those days have flown. At Durant we have as agent H. F. Lowrance, who has been for several years agent and operator at various places on the line. During the day John Fitzsimmons—familiarly known as Fitz—assists all. George Scott, with the aid of some nice blankets and an arm-chair, does the business all night long. At West J. H. Armstrong does agent's and operator's work. H. K. Allen does the same at Vaiden. At Winona E. J. Marshall does the day work and H. L. Strickland plays owl. At Grenada, W. H. Redding holds forth as ticket agent and operator. Red is one of the No. 1 men. The W. U. office at Grenada is managed in fine style by Mr. Tom Matthews. At Coffeeville, A. L. Gilthrap is agent and operator, and is an old and efficient employe. At Oxford, the railroad office is managed by Mr. Mitchell; the W. U. by Mr. Dotterty. Holly Springs has for agent J. T. Garner, an old operator, one of the best men in the company's service, and an accomplished gentleman. He is very ably assisted by H. C. Cromer as ticket agent and operator. B. Swatt acts owl. Mr. S. has been unwell for some days on account of severe cold. The W. U. Co. is to be congratulated on securing the services of L. S. Moses as manager of its office at Holly Springs.

NO SIG.

* * *

Metuchin, N. J., Items

There are quite a number of telegraphers residing in this village, several of whom have retired from the service. First on the list comes the veteran Cutley Price, who, while in the biz never took a back seat. He is now partner in a provision business, and rumor says is coining money. Cutley often wanders down to "His" P. R. R. office to listen to his favorite music and chat with the ambassador and poet from Wilmington, Del., J. A. Lyons, who taps the keys there days, and R. Forrest, who attends to the sittings at night. At the depot we also find A. C. Case, ticket agent, and J. D. Schenck, both retired from telegraphic service and acceptably filling the positions they now hold. The efficient and and popular train dispatcher L. V. R. R. G. B. Brodhead, also resides here. He has an office at Perth Amboy. Meandering down to the L. V. R. R. office in this place we find the old timer, P. M. Diver, who holds the position of division operator, and freight agent E. and A. Dawson. He keeps close watch over the boys under his charge and has a lookout for breakers. There we also find the portly Jenkins, a brick of a boy, and the night owl Ackerman, the wide-awake youth for Tilden and reform. Business is very dull at this office since the company made such a sweeping reduction of trains. Your valuable paper has first just been brought before telegraphers in this section, as it should have been long before, and I predict for it a generous support from them in the future. Wishing for the same the success which it merits, I remain,

Yours truly, A. G. ARS

* * *

A WORD OF THANKS TO "NUF CED."—Our numbers are not legion, but there are enough of us scattered along a certain railroad wire—all plugs, though we hope we will not always be. We want to thank "Nuf Ced" for his generous defense of our cause.

A. B. B.

From a Poetic City Line Lady Operator.

I hope the "current" of your life may ever run smoothly, and without "crosses" or "breaks." May you always have a through "circuit" to the "main office" of our great Manager. God is the magnet; you the armature. Strive to keep "adjusted." "Insulate" yourself from the devil's power by having on God's mighty "arrester"—religion. Our lives are like wires running into a switchboard. Earth is the board. Two lines run from it, one to heaven and the other to hell. Good and evil are the plugs by which we connect ourselves to either line. By using the former we reach heaven; by using the latter, hell—and with a very slight battery at that. Be sure that you are on the right side of the board, and bear in mind that every thought transmitted from the heart is "received" by the angels, "relayed" to heaven, and there "registered" for or against you by the accountant, and when you at last "cut out" and bid this world an eternal "G. N.," I hope you may have the "key" of heaven in your hand.

Philadelphia Notes.

Charley Moore, at his own request, has been transferred to the day force. He has been succeeded on the Pittsburg wire by Supt. Black. Herman Schussler has been transferred from the regular day to a night trick. It has been our doleful task, for some weeks, to chronicle the departure of a good many of our friends from this office, but it is our pleasant duty on this issue to record the return of John Vollrath, who has been assigned to his old post on the Continental pony. John is a composer, and musician of some note; he is characterized at all times by a noble bearing and manly deportment. Jake Andereon, of this office, has taken out a patent for an improved type printing machine. We understand it possesses many advantages over those at present in the market.

The Western Electric Manufacturing Company of Chicago have opened a large establishment at 628 Chestnut Street. They make a very fine display of telegraphic and electrical apparatus. Monk Monroe has arrived here from Houston, Texas. Ed. Hall, of the Local Co's office, 1330 Girard Ave. has a cat, which we are assured has become quite an adept in manipulating the key. This is a new species for the unmitigated plug. for whose definition your corres ondent cordially appeals to the deep and astute thinkers who write for The Operator.

N. Y. Div. P. R. R. Notes.

We have a force of six dispatchers and six operators in the train running room and four operators in message room. The following gentlemen keep an eye on the dispatchers part: I. A. Van Dusen, "the corpulant" Ed Brock, "an old and tried" dispatcher, Geo. W. Waite, E. Headly, J. W. Adams, a descendent of old John Quincy, and last, but not least, Charles Laing, alias "Roxy," assisted by the following operators: B. F. Van Winkle, George Lannahan, John H. Plant, who has lately been duplexed, Joe Mills, the gallant, F. J. Weis, operator and extra dispatcher, and A. Miller, better known as "Bugs." With this force in train room it can be safely said that the lives of the thousands of passengers are as free from disaster as they would be at their own firesides, and great credit is due the above gentlemen for their masterly work done during the Centennial Exposition when millions of people traveled over the road without a loss of a single life. Over four hundred trains daily being dispatched over this division. The message room is under the management of the old timer, J. O. Chambers, assisted by the following manipulators: W. E. Haverstick, E. B. Douglas, and J. N. Redfern—a quartette hard to beat, and who did admirable service during the Centennial, averaging 800 messages a day, and railroad messages, you must admit, are of the character of letters. The highest credit is also due to the operators along the line of this division for their skill in handling the trains during the great Exposition, all being under the supervision of our gentlemanly and courteous division operator, William Ettenger, ably assisted by W. H. King, whom the ladies all call "Handsome Harry." O. C.

Jersey City, Feb. 1877

* * *

This is the first number of The Operator's seventh volume. A good time to begin new subscriptions. Suggest this to your neighbor, and send him your copy this issue after reading it, that he may see what the paper is.

One of the ladies who occasionally works with an electrician—that is to say, a person who uses dots and dashes as a bowler does ten-pins, knocks them around indiscriminately—was a day or two ago observed to have become very flurried in a vain endeavor to devine the meaning of his frantic sputtering. Her next neighbor sympathetically inquired if she was being rushed, to which the lady resignedly responded, "Well, yes; but since the arrival of the Grand Duke Alexis, I suppose *Russian* will now be the order of the day."

* * *

From Springfield, Ill.—Our big rush is over for the present, the Senatorial question having been setted, and we have again quieted down to easier times—very little news to be picked up now. The "Smith" boys still hold out at the W. U. office. These, with Mr. Kelchner, Sr., the manager of the office, and his son George, constitute the regular working force. None of the boys here have decided as yet to attend the Chicago telegraphers ball, although they offer to get passes for us to and from Chicago. If anything interesting in these parts, you will hear from Relay.

* * *

Titusville A. and P. Notes.—Notwithstanding that business is unusually dull at present, the A. and P. is doing a pretty fair business in the oil regions. We number about 150 each way with Oil City. Oil City numbers about 200 each way with Parker City. J. Dixon is manager at Oil City, and has a very able force, consisting of Col. Drake, Charlie Hughes, and F. L. Wellner. Drake and Hughes work the Parker duplex, and Wellner the Titusville wire. Parker office is doing a very good business under the new manager, John Algeo, who is assisted by Adams and Kenney. Titusville office is not far behind the rest, doing nicely. C. A. Bolton manager, Charlie Gray assistant.

PERSONALS.

Mr, Ren W. Crockett, is operator and freight and ticket agent of the Wabash Ry., at Delphi, Ind.

Mr. Fred Craig, Jr., formerly of the N. Y. C., presides over the Sheffield, Pa., office. "Cy" can't be beat.

Alexander Bain, inventor of the electro-chemical telegraph, and Alfred Smee, of Smee Battery fame, are dead.

Mr. Norris Rodney holds forth in the city office at Morristown, N. J. Rodney is a member of the Y. M. C. A.

Mr. George Wire, manager and chief operator at Chatham, N. J., holds his end of the mystic wire up in an efficient manner.

Mr. C. Curtis is at the N. J. State Asylum for the Insane at Morris Plains, N. J. He holds the position of operator and clerk.

B. P. Shreve, of W. U. office, Selma, Ala., has been transferred to Chattanooga, Tenn., and L. M. Johnston, night man A. C. R. R., Selma to Macon, Ala., on same road.

Mr. W. S. Mack, formerly operator for the W. U. at Sweeny's Hotel, New York, has had the offer of a good position from the same company in Brooklyn. If he accepts we wish him success.

Dany Boyle attends strictly to business at W. U. branch office in the works of P. P. Mast & Co., Springfield, Ohio. Dany formerly "took" report at main office over the counter from the outside.

The Montreal telegraphers gave a very enjoyable ball at Toupin's Hotel, February 22d. The committee of management were Messrs. M'Connell (chairman); Cherry, Powell, Eacutt, Lester, Hickey, Scott, Fletcher and Wayne, and Mr. James Kent, secretary.

Mr. J. M. Hogan, of the N. W. Office, Milwaukee is general agent for The Operator, Oakum Pickings and Lightning Flashes in the north west. All orders sent to Mr. Hogan will receive attention on same terms as if sent direct to this office.

Mr. E. Somerville, Pacific Coast Agent for The Operator, Oakum Pickings and Lightning Flashes, San Francisco, Cal., will be pleased to receive and forward items, personals, &c., for the paper. Eastern telegraphers want to hear what is going on in the far west. Won't their California brethren keep them informed through The Operator.

Some of the C. C. C. & I. Boys.—At Miamisburg, Ohio, A. E. Platt holds forth days and W. E. French nights. At Franklin, J. A. Barkalow and J. S. Todd; Middletown, T. B. Woodmansee and J. B. Roller; Munroe, Mart Lee; Mauds, C. A. Kuhns and Joe Page; Sharon, Tom Heltser; Lockland, E. R. Bonnell and Ed. Oldfield; Carthage, Theo. Trancevan; Ludlow Grove, E. C. Crewson and J. B. Spencer; Cincinnati, Lemen Peck.

Mr. W. J. Curtis, of the W. U. office, Fort Scott, Kansas, came nearly losing his life last week by an explosion of gunpowder. It appears that he brought out a can of powder for the purpose of filling his powder-flask. This done, he set the can upon the floor, and while otherwise engaged, his dog upset the can, spilling a large quantity of powder on the floor. Needing a better light to see to remove it, he brought a lighted lantern near it, when by some unaccountable means a spark fell from the lantern to the powder. An explosion ensued: the flames flashing into the face of Mr. Curtis, causing some severe and ugly burns. He may congratulate himself, however, on escaping so easily.

We have endeavored for some time to have the Dominion of Canada properly represented in the columns of The Operator, but without much success. Mr. N. D. Webster has now consented to act as General Canadian Agent for The Operator, Oakum Pickings, and Lightning Flashes. All orders sent to him will receive attention on same terms as if sent direct to this office. Mr. Webster will also be pleased to receive and forward any items of news, etc., sent him by friends of the paper in Canada. Let us hear from the Dominion. Mr. Webster's address is Montreal Telegraph Company, Toronto, Ontario. Keep him informed on telegraphic matters in Canada.

St. Valentine's Day, February 14th, was rendered especially memorable to telegraphers in Norwich and New London by the announcement that D. H. Bennett of the former city had "folded his tent and silently stole away" to New York city to be married. Diligent inquiry only served to strengthen the report, and congraulatory telegrams found the gentleman at the Astor House, New York, enjoying his nuptials. The bride is Miss Emma Stoddard, a refined young lady just graduated from a young ladies academy at East Greenwich, R. I., who, besides possessing physical charms, is an heiress to a sum variously estimated at from $15,000 to $20,000. The marriage ceremony was performed by the Rev. Dr. West, of New York, in the presence of a few select friends. Dan is Superintendent of the Fire Alarm telegraphs of the city of Norwich, and was for several years manager of the A. & P. Company's office in that city. He enjoys an extensive acquaintance among telegraphers, and has a host of warm friends, who wish him and his young bride a happy life.

BIRTHS.

February 16th, 1876, to A. H. Stoner, of the Chicago W. U. main office, an eight pound daughter.

February 8th, at Oakland, Cal., to Mr. Bennett R. Bates, manager W. U. Tel. A daughter.

At North Sydney, C. B., December 29th, 1876, to Frank T. Le Moine, W. U. Tel. office. A son.

February 11th, at Buffalo, N. Y., to Joe Anderson, W. U. Tel. office, a girl—nine pounds—second edition.

At Jersey City Heights, January 2d, to Fred Bligh, of Newark Avenue (Jersey City) office, P. R. R., a daughter—first edition.

MARRIAGES.

Schug—Blake.—February 22d, at Hatboro, Pa., Mr. Allen Schug, manager W. U. Telegraph office, Jenkintown, Pa., to Miss Emma K. Blake, of same place.

Morrison—McKennon.—February 8th, at Minden, La., Mr. J. P. Morrison, night operator H. & T. C. R. R., Calvert, Texas, to Miss Susie McKennon, of Minden.

DEATHS.

At North Sydney, C. B., January [illegible], [illegible] Kavanagh, [illegible] son of Frank and [illegible] Le Moine.

Can be Ordered at once. **Price by mail $1.50.**

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Scenes on a Jersey Railroad.—DRAWN BY J. CHRISTIE.

"Two plugs with but a single thought—Two keys that beat as one."—— *Ingomar Altered.*

LIGHTNING FLASHES is now in press, and will be issued on or before April 1st. We are now ready to receive orders, which will have attention in the exact order in which they are received. Although the expense of the work, on account of the size of the book, the page being fully three times the size of OAKUM PICKINGS, and the very large number of engravings prepared especially for it, has been very great, we hope to dispose of a large number of books, and have therefore decided to put the price down to $1.50 a copy.

Order now, and get a copy as soon as issued. Agents are wanted everywhere.

We will thank Telegraphers if they will draw the attention of their friends in the Telegraph profession and outside, as well as booksellers and others to the work and, if possible, secure us a few orders.

We will send LIGHTNING FLASHES, prepaid, to any address, on receipt of price, $1.50; LIGHTNING FLASHES and OAKUM PICKINGS, $2.75; or LIGHTNING FLASHES and THE OPERATOR one year, for same sum.

To Agents we will sell the book for $1.25 a copy. Three copies must, however, be ordered at one time, to secure this reduced rate. Single copies will afterwards be sold at same price. Get two of your friends, Telegraphers or outsiders, to join you, and order three copies at $3.75.

W. J. JOHNSTON, Publisher,

P. O. Box 3,332 New York.

W. C. LONG, General Western Agent W. U. Tel. Co., Chicago, Ill.
J. M. HOGAN, Gen. N. W. Agent N. W. Tel. Co., Milwaukee, Wis.
E. SOMERVILLE, Gen. Pacific Coast Agent W. U. Tel. Co., San Francisco, Cal.
N. D. WEBSTER, Gen. Canadian Agent, M. Tel. Co., Toronto, Ont.

1. Entree.

2. Placed—"That familiar sound."

Contents and Illustrations of "Lightning Flashes."

Read the names of some of the coutributors—only a few. We have not room for a complete list:

Joseph Christie, "Werner,"
E. O. Chase, "Nuf Ced,"
W. P. Phillips, "John Oakum,"
D. C. Shaw, "Oney Gagin,"
T. C. Noble, Jr., "Chops,"
G. W. Russell, "Ruddy,"
Benson J. Lossing, Author U. S. History and other Standard Works,
J. A. Clippinger, "Samson," Author "Pedagogues of Widows' Gulch,"
J. M. M., Author of "Was She Wrong?"
Charles Barnard, Editor "World's Work," *Scribner's Monthly*,
J. D. Reid, Secretary and Treasurer G. & S., ex-Superintendent, and ex-Editor,
Ralph W. Pope, Superintendent G. & S., Telegraph Co.
Geo. H. Bliss, General Manager Western Electric M'f'g Co., Chicago, and many others.

Among the artists may be mentioned, besides others, J. J. Calahan, New York, and Joseph Christie, Philadelphia, and among the full-page cartoon engravings, drawn and engraved especially for Lightning Flashes:—Telegraphy, Ancient and Modern (double page); The Telephone (double page); The Manager is In and The Manager is Out (double page); Scene A.D. 1900; Humpty Dumpty Fox The Heathen Chinee and the Shocking Machine; Position Is Everything; Scenes on a Jersey Railroad; The Quadruplex; Discussion About Putting "Ile" in the Batteries; Scene in the W. U. Main Office (three pictures); A Deep, Dire, Dreadful Tragedy in Four Acts; Te–leg–raphers, etc., besides numerous smaller illustrations explanatory of the reading matter, a large number of the articles containing from one to six illustrations. The portraits and short biographical sketches of several prominent contributors and other telegraphers, each making one full page, are added, making the book literally overflow with illustrations.

We give the accompanying pictures as a sample of the cuts in Lightning Flashes, though they are by no means as good as the majority of the engravings. The book is beautifully bound in full cloth, like Oakum Pickings, and from the above names of the well known contributors it will readily be seen that the work to telegraphers must prove "a thing of beauty and a joy forever." No telegrapher can consider his library complete without a copy of Lightning Flashes; and as all the matter in it can be understood by persons not connected with telegraphy, it is hoped the book will have a large sale among outsiders. Agents are wanted everywhere to introduce the book.

Lightning Flashes and Oakum Pickings.—We will send, prepaid, to any address, a copy of "Lightning Flashes" and a copy of "Oakum Pickings" on receipt of $2.75, or Lightnig Flashes and The Operator one year for the same sum.

3. Ha! Ha! I hope he'll rush me!"

4. Rushed!

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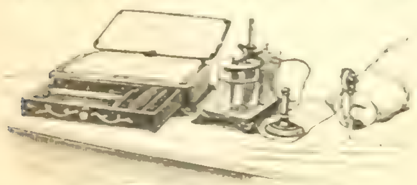

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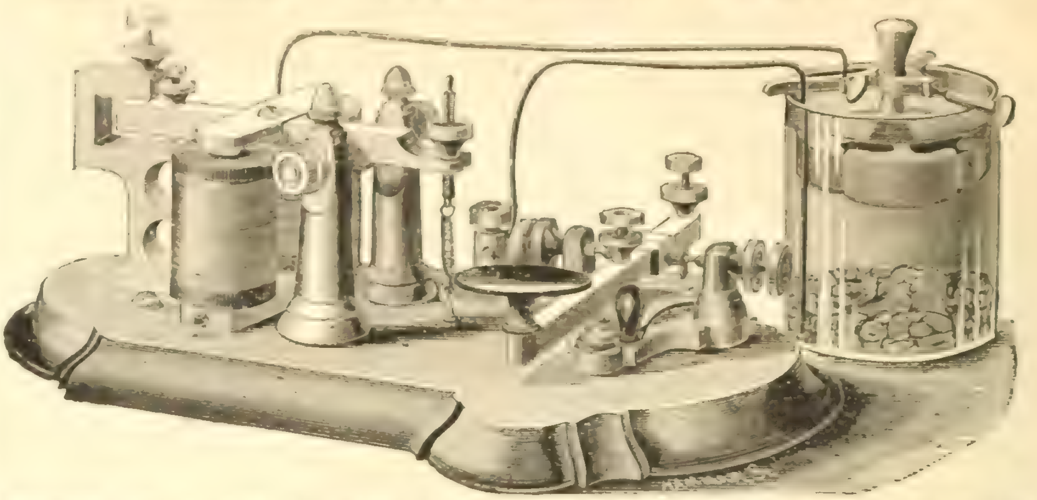

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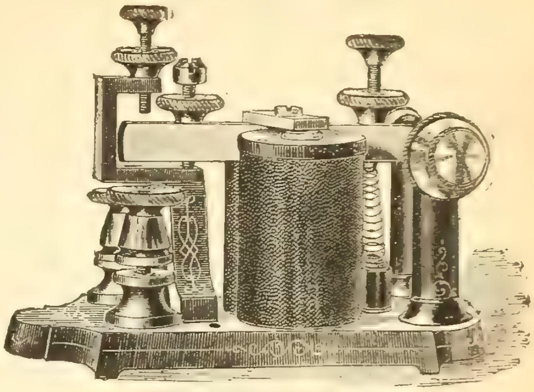

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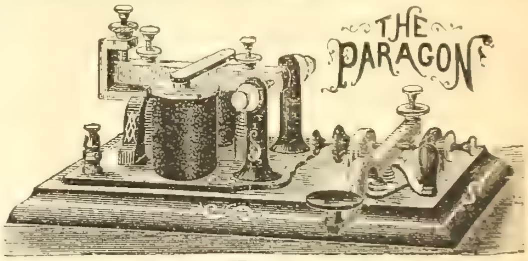

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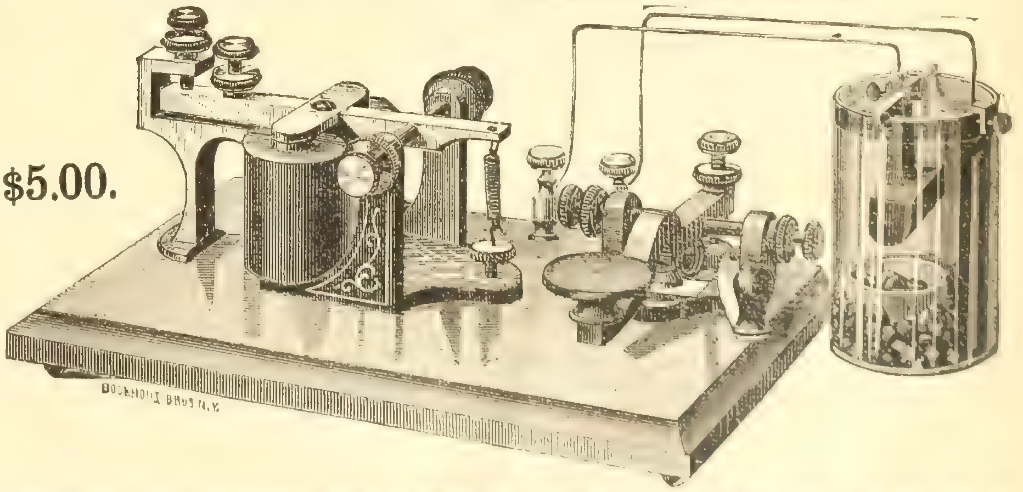

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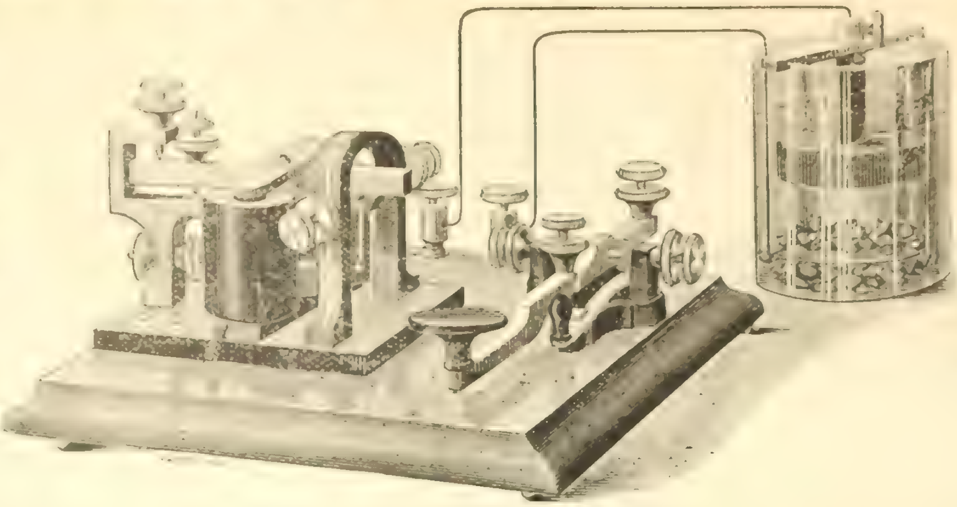

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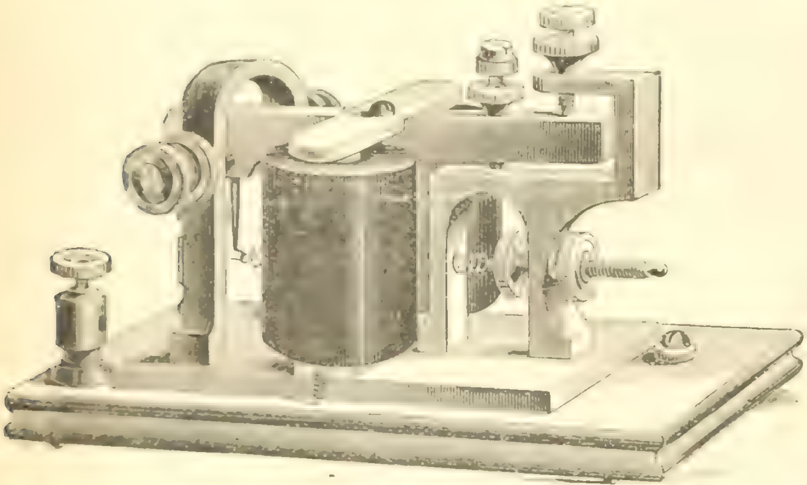

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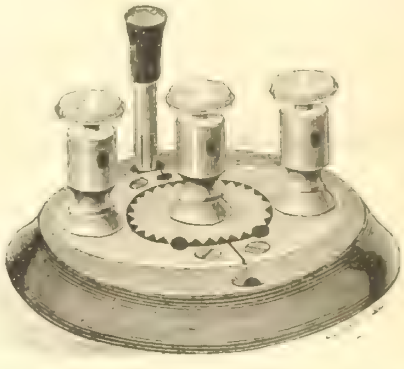

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VOL. VII. NEW YORK, MARCH 15, 1877. No. 2

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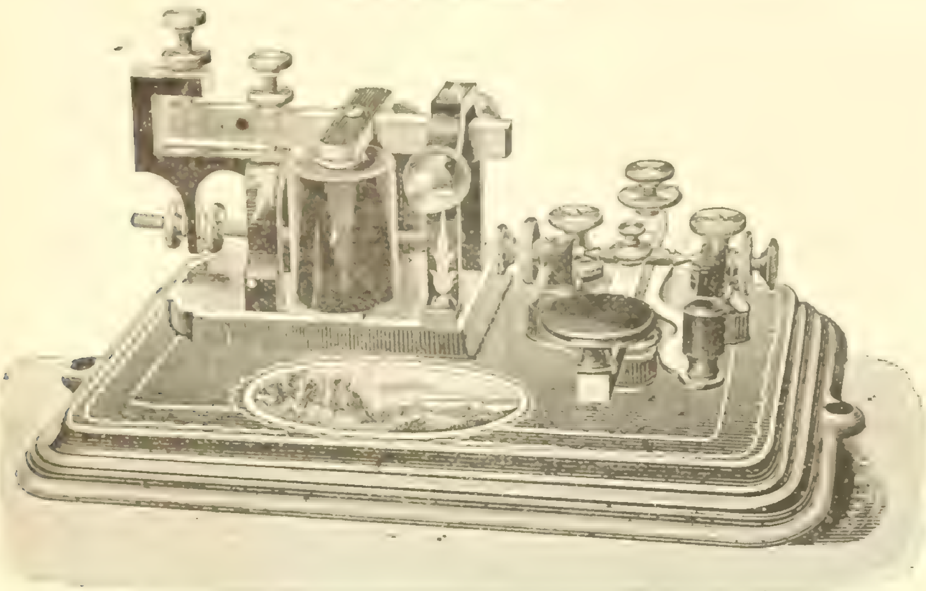

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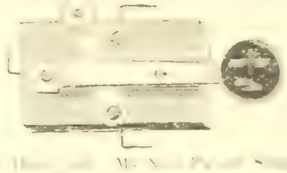

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[illegible] and at the present [illegible]

[illegible]

[illegible] very slowly upon it, and then only to the extent of [illegible]

[illegible]

[illegible] effect upon it.

[illegible] injured it.

[illegible] experiments have shown that it does not suffer in[illegible]

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Jno. L. Lay, Esq., the inventor of the famous torpedo bearing his name, says that he thoroughly tested the Kerite cable in this country and also in Egypt, and finds it preferable to rubber or gutta percha, heat not affecting it, and so far as his experience goes, it is proof against the "teredo."

Messrs. Gamewell & Co., proprietors of the American Fire Alarm and Police Telegraph, have used the Kerite wire for ten years. They say: "We have placed it in use in some sixty cities, extending from Halifax, Nova Scotia, on the north, to New Orleans and San Francisco on the south and west, embracing every variety of climate, and it has proved itself to be, under all circumstances, the most reliable and indestructible insulator known to us for telegraphic purposes."

The experience of other parties using the Kerite coated wire overhead, underground, and under water, is almost precisely similar, and is well summarized in the following opinion of George B. Prescott, Esq., the Electrician of the Western Union Telegraph Company. Mr. Prescott says: "In September, 1869, we placed some of your Kerite wire, unprotected by any covering whatever, in the tunnel under the river in Chicago, and have since continued its use in that exposed situation with the most gratifying results. A portion of the tunnel is very wet, and water, saturated with lime, constantly drips upon the wires, while in other portions they are kept alternately wet and dry, which is well known to be one of the severest tests that any insulating material of an organic nature can be subjected to; and yet, after five years' exposure, under the above conditions, the Kerite covering shows no signs of decay or deterioration. An insulating covering of India rubber or gutta-percha under a like exposure, would have been destroyed in much less time."

For further particulars, address,

A. G. DAY,
120 Broadway, New York.

THE OPERATOR,
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Out of Adjustment.

A telegraph office, plain and simple,
  Furnished poorly and scant in space;
A youthful maiden with smile and dimple,
  Adorning a delicate, winning face.
A single window to light the room,
  Its view obstructed by cars of freight;
A depot dreary, nor thrift nor bloom,
  But all around a desolate state.

Now working her key with might and main,
  As though the current were feeble and weak,
Now closing the same again and again,
  As if to let Patience whisper and speak.
Adjusting the relay with hope in her heart,
  Once more she strives to accomplish the deed,
But failing, the tears from her eyes quickly start,
  And flow unrestrained till her great grief is freed.

"Sweet maid, why labor here?" said I,
  While with pity my throbbing heart stood still;
"Why stay out here to languish and die.
  When you can know content if you will.
Go to the city and merry be!
  Go where the currents and wires are good!
Seek thou an office where thou canst see
  The beauties of nature, of river and wood,
The busy motion of toil and pleasure,
  And of life's many joys find a comforting measure."

Thus did I speak to that fair gentle maid,
  As I loitered one day near the rural depot,
Awaiting the steam-horse to come down the grade,
  Which was now behind time an hour or so,
Watching her face through the little soiled pane,
  I saw her despair and her tears gently flow,
And sympathy strong that I could not restrain
  Led me into the office my comfort to show.

For I was a knight of the telegraph key,
  And knowing that currents when terribly weak
Beget a fell anguish, a dire misery
  That pen can't portray nor human voice speak,
My heart urged me forward; go in there I must,
  And do what I can to offer relief;
Perchance I could teach how to gently adjust,
  And, if this were the trouble, dispel all her grief.

"Pray dry thy sad tears, my dear little friend,
  And let not harsh sorrow be stamped on thy face;
Invoke the bright angels from heaven to send
  Pure smiles of bright joy thy sweet visage to grace;
Courage is thine if patient you'll be,
  For patience is courage, and courage is power,
Before it despair will instantly flee,
  And your mind over sadness triumphant shall tower."

The words were scarce said when a smile most serene
  Appeared on her face, and illumined it o'er
Like a beautiful rainbow that's oftentimes seen
  Succeeding the raindrops which come with the shower;
And the sweet glance she gave me of gratitude's trust,
  As she raised up her eyes and gazed softly in mine,
Was so tempting and winsome that kiss her I must,
  And our lips met together on love's holy shrine.

This tribute to love had scarcely been paid—
  We still stood together in ardent embrace—
When puffing and screeching down over the grade
  The steam-horse rushed in; in a moment of space
A ruddy cheeked brakeman leaped out from the car,
  His eyes flashing anger, a cane in his hand,
And, quick as the flash of a twinkling star,
  Right there in the office before us did stand;

Then speaking to me in a loud angry tone,
  His cane raised aloft just over my head.
"What brought you in here with my girl all alone,
  Embracing, and kissing, and loving?" he said.
"This girl and myself have long been engaged;
  And for so heinous an insult I'll have your vile life;"
Ye gods! that young brakeman was greatly enraged,
  For I had been kissing his dear future wife.

As for me, there I stood, not a word could I speak
  To explain a perplexing position like this;
I acted dejected—exceedingly meek.
  But my fears quickly fled when that fair gentle Miss,
Addressing her lover with faltering tone
  Said, "Harry, my love, pray let me explain
The reason this youth was with me alone,
  Embracing and loving again and again.

"You remember I told you a short time ago,
  Of a darling young cousin I had in the West?"
"Why yes," he replied, "you did tell me so,"
  "Well, this is the one," said she, laughing with zest,
"And now on the way to his old native town,
  He stopped here to see me an hour or so.
Now, Harry, my love, take your horrid cane down,
  This youth is my cousin, but you are my beau."

His anger had vanished, his cane had come down,
  But not on my head as I tremblingly feared;
A smile had supplanted the harsh angry frown,
  And instead of abuse a kind greeting appeared,
He grasped my hand quickly, and shook it with zeal,
  While the fair maid most lovingly stood by his side;
I was saved from a caning, but could not help feel
  That the angel beside him had fearfully lied."

As we parted that day she whisperingly said,
  "You adjusted my relay, assuaging my tears,
And I in return have reciprocated,
  For I soon "adjusted" your troubles and fears.
Your work was performed by the rules of the *line*,
  I copied from you with the best of success,
My work, too, was done by the rules of the *lyin'*,
  And saved you and me from great trouble I guess."

RUDDY.

NEW LONDON, March, 1877.

* * *

Popular Science—The Future of the Telegraph.

WERNER.

Fifty years ago Lord Liverpool solemnly pronounced Thomas Gray, of Nottingham, "a bore," for his persistent advocacy of an "iron railway," and since that time, within the memory of even many young men, the inhabitants of Newton-in-the-Willows drove off with pitchforks the surveyors of the first railroad in the world. The good folks of those days were not given to falling in love with every new financial scheme. The Bridgewater Canal, the stage coach, or a solid highway to walk upon were sufficient for them, and so they refused to countenance any new fangled notion which would upset the dear old regimé.

It is pretty much the same with us to-day. We have our four hundred thousand miles of wire to salt each other in an old fashioned way; we revel in our quadruplexes and free lunches on election nights; we come late, send bad Morse at the rate of fifty words a minute, and do everything that reasonable ambition will admit of, so that when the mazarine blue glass man, the telephone man, and the other innovaters come prospecting among us, we pitchfork them just as our forefathers stabbed at the railroad men. Yet, with all their antipathy, necessity subsequently compelled them to act and improve upon the theories which many then held, for peace and war both made it a necessity. It is not a great many years since Congress snubbed Prof. Morse, and failed to see any use at all in a telegraph, yet Peter Cooper—who lately ran "third" in the Presidential race—was a full grown man when on the eighth of January, sixty two years ago, thousands of men were killed or wounded in the Cypress Swamp near New Orleans—a butchery which the telegraph would have rendered unnecessary, since neither Pakenham nor Jackson was aware that the virtual treaty of peace had been signed at Ghent more than two weeks before. Again, one year before this event, on the fourth of April, the immortal Napoleon signed his abdication at Fontainebleau, while hostile legions all unconscious of the revolution in affairs were confronting each other in the south—the points of communication being as close as from New York to Buffalo. Nobody saw any use in a telegraph, though; oh, no—such a thing was the dream of a crazy enthusiast. Swift couriers—the fastest medium known to or cared for by the people of those days—were "speeding" southward, yet *ten days* afterwards, both commanders being still unapprised of the abdication, there came the terrific clash of arms between Soult and Wellington, and ten thousand dead bodies were needlessly strewn on the field of Toulouse. But these stubborn facts conquer in the end, and though the opposition may prevail against our new theories for awhile, we must, sooner or later, triumph.

In presenting a horoscope of the future, it will be as well to avoid mention of the possible time—though such a horror-scope may be a correct one—when ruinous competition shall have brought us to the deplorable spectacle of a once proud corporation hiring unprincipled men to stand in long lines clamoring at its counters with bushel baskets of alleged messages—acting as customers merely to bulldoze its rivals; nor need I disclaim any gift of second sight in predicting that the advertised rates will then be, a twenty-word message—with nineteen errors in it—a chromo, and a schooner of beer, all for ten cents. When it comes to that, as suicidal competition always does, the modern operator may as well drop the subject altogether; take his chromo and double-decker of lager, buy himself a gilded sword, and, as many others do now, retire into private life with a high sounding military title.

Nervous shareholders, carping tories, and hypercritical disciplinarians teach us to let well enough alone; and now, after contemptuously sneering at the efficacy of blue glass, they affect to view the telephone with aristocratic disdain. However, in view of the overwhelming testimony of history, I do not despair of seeing at some early day blue messages instead of those obnoxious "reds," blue envelopes for error tracers instead of the hated yellow, blue ink, blue superintendents, blue everything; and, for encouragement to the wavering ones in this new faith, I point exultantly to the good looking Neddie *B'lew* for a specimen of the super-excellence which that genial color will produce in our ranks. After that, the telephone.

Whatever the historians may say of my rendition of events at New Orleans or Toulouse, no one will be wild enough to dispute the beneficial and novel results of a perpetual free concert on whatever of mind is possessed by our profession, since the influence of music is attested on all sides. To illustrate this I need only refer to the herculean efforts which a solitary cracked fiddle will extract from a ship's crew while running around with the capstan when the anchor chain "sticks." There are many reasons for the anchor sticking or refusing entirely to come up. She may be bringing up seventeen tons of sea-weed, or a whale, or the wreck of a man-o'-war, but in all such cases it is necessary to "adjust" or "turn up" just as we do in telegraphy only on a larger scale. To attain this end—when human effort seems powerless to move the great weight—a ringing tenor voice strikes up the plaintive chant, "Haul in your bow-lin', the big ship is rollin'," and any one who has luxuriated at sea can testify to the magical result. A lusty chorus immediately drowns out the rumble and roar of the waves in responding: "Heigh, haul away, haul away, my rosey," and the next moment you hear the ponderous chain creak, creak, and away go the merry crew, singing like good fellows as they are, scampering around in their mad whirl, bringing up the dripping anchor, whales, an' all.

Now, this is exactly what the telephone proposes to do for us; that is, supposing that the Boston Rubber Shoe Company (but "G. A. gum-shoe" has always been looked upon with suspicion by us) is a reliable concern, since much of the testimony comes from them, supposing that the operator at [illegible], Illinois, who heard "Ninety and Nine" played on his switchboard, is not afflicted with that disease which brings vividly to our imagination [illegible] rats with elephants' tusks, pinwheels, sky rockets, and snakes, and supposing that Professor Bell, in the wonderful exhibitions now being given, does not keep a ventriloquial confederate or a [illegible] cantatrice under the stage to answer telephonically all queries or sing "Auld Lang Syne." Setting [illegible] objections as the dismal [illegible] of an [illegible]. We are safe, to [illegible], in saying that in the near future we are to be constantly regaled with vocal music—of the telephone—and our daily programme will be the ravishing sounds of distant music from that. We are destined soon to hear "Tramp, Tramp, Tramp" every morning on the telephone by an [illegible] night operator to infuse new life into the day comers, while the pathetic strains of "Good-by, Liza Jane" will announce the close of our daily labors. The crowds that have every hour appreciated in our profession will be to sing "When Johnny Joined the Gang" loud enough to be heard through four telephone repeaters, and those who are unable to treat with a good grace will be called plugs. "Down in a Coal Mine" will be the favorite wire ditty three days after pay-day, when every common operator is in the [illegible]; while night operators will be deprived of their customary naps on duty by the [illegible] refrains of belated day men calling into distant offices on their way home, and singing "Won't Go Home Till Morning" over the wires. High officials with healthy lungs will sit in their offices and by means of the telephone send inquiring [illegible] to the tune of "Oh, Dear What can the Matter Be?" to which the dejected manager, who in a fit of [illegible] economy, has just hired a couple of very cheap but exceedingly short-winded young men, will reply in the doleful strains of "The Heart Bowed Down," etc. The warbling of Patti at Paris will be rapturously listened to on our cable lines, and, although we may all be exposed to the present risk of some country office breaking in with disjointed and creaking selections from the "Skidmore Guards," the usual injunction to "swim out" can be issued much more expeditiously than by the present system of explaining the situation to him with numerous repetitions; and certainly more charitably than by blowing him up with the big battery.

It is a remarkable fact that improvements come in battalions—one improvement suggests or necessitates another. Now, as a knowledge of some language which is reasonably understood by the man at the other end of the wire, a voice like a [illegible], and a diaphragm of soft iron will be all the requisites of a first-class operator in the near future, the proposition must be at once apparent to the most conservative intellect that everybody who is not absolutely a deaf mute must necessarily be a full-fledged operator without securing a twenty-five dollar illuminated diploma from a "college." I need not argue to prove that telegraphic manners and customs will consequently be instilled into our rising youth, though I might, if I had time, demonstrate that the coming generation of confiding parents will be [illegible] out of pocket thereby. Medical students—always anxious to amputate anything at all—believe firmly that brevity is the soul of wit, and as we are classed as a witty class, we think so too; only, we go farther, and hold that brevity is the very soul of telegraphy itself. Now, as the world becomes telegraphers, they [illegible], perforce, consider the time occupied in the worldly system of conversation as irretrievably wasted, and following this conviction will be the ready adoption of our expressive abbreviations and technicalities by the world at large. On the principle of progression, we will thus soon attain a wonderful system of condensed speaking. The greatest abbreviation now in vogue, the Atlantic cable cypher code—which, by the way, was sent collect—making "[illegible], cramp, emerge, pot-house," etc., [illegible] of the [illegible] situation, will then be considered as a [illegible] waste of ink and paper. [illegible] will [illegible] so that the broker will think in our own [illegible] abbreviations for bulls and bears, puts and calls; the sailor will be [illegible] to shiver your timbers or [illegible] of [illegible]; [illegible] and the [illegible] will use the [illegible] of [illegible] abbreviations as pi's and ads, quads and cases; [illegible] will be abashed by a telegraphist's comparison with such [illegible]."

The telegraphic age now fast coming will be the Phonetic age, and the world in saving its breath will save its pocket [illegible] telegraphic form of everything. [illegible] will be [illegible] adopted. [illegible] will be [illegible] and when the [illegible] his lady-love, and bid the admiring throng pledge her in the wine cup, his simple toast shall be "73," while the enthusiastic response will be eloquently expressed by the conventional and convivial "[illegible]." At the barber shop crowded full of customers, when under ordinary circumstances one would have to wait for his turn three hours, besides buy up two bottles of shampoo, a man, frantic wild with excitement will come rushing in, helter skelter, frantically screaming the magic word "nine." In an instant the shop will be in an uproar, barbers will hurriedly hustle and jostle each other, diving into mysterious closets while nothing remains to view but their boots, and reappearing with glistening brand new razors and jack-planes, the rightful occupant of the chair will be unceremoniously hustled out of it with the lather all over his face, and only half his whiskers shaved off, while, in deference to telegraphic rules, the last comer who gave "nine" will be accorded precedence over all. Then think what a convenience to a preacher—Talmage, for instance, preaching to telegraphers—when his sermon has been interrupted by some unappreciative and soulless operator down in the bottom pew; when, in the interests of love and peace, the good pastor has come down and, in a laudable endeavor to loosen the miscreant's hold on the venerable deacon's scant supply of hair, battered the refractory worshipper over the head with a hassock, how glibly he could, before resuming, interrogate his dearly beloved brethren with the simple query "four?" Or if he wished to be profuse, he might inquire "Four in that sermon?" Think of the convenience to the loud mouthed man over near the door, who was waked out of a sound sleep by the fighting, responding briefly: "Go ahead, 'Paul said;'" and what a short space of time would be needed by the clerk to bid him "turn it down." What a saving of legal forms and rhetoric will be effected by the judge merely requesting the malefactor at the bar to "sign," or by blandly inquiring "134?" Or "sqe," as the latter abbreviation, owing to extensive plug immigration, has superseded the old time "134." To the car conductor, our new language will be worth a new pair of lungs, as instead of clubbing those nearest the door, he can summarily order his standing load of passengers to "27" up at the other end of the car, so that he may squeeze in another victim or two. Think what high and angry words, what objugatory phrases will be totally abolished when the rising young man, after staying out until 2 A. M., comes sneaking up the back stairs with his shoes in his hand and wearing somebody else's coat, two yards too long—one that he took by mistake in the billiard room—how the stern and watchful old man will terrify him by the simple inquiry "18?"

Truly the telegraph is only in its swaddling clothes.

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A Practical Joke.

The denizens of Omaha office are all first-class men and courteous gentlemen. They do their heavy business in a rapid and artistic manner, and sometimes the hooks are clear, business dull, and jokes on each other as well as country swells in order. The way it was played on R. E. Mulcay, night operator at Carroll, Iowa, is too good to lose. His name formerly was McKay, but since receiving a message from his father, signed Mulcahy, it has changed to Mulcay. Of course, he is a No. 1 operator, wears a No. 10 hat, and the way he rushes the average railroader is a caution. It is only the short-sightedness of narrow-minded officials who fail to appreciate merit that prevents him from being superintendent of telegraphy or chief train dispatcher.

In order to carry the joke through, the assistance of a well known and fun-loving dispatcher was obtained. All being in readiness (the operators on the line having previously received a wink), Omaha called Carroll and asked for check to a red message sent earlier in the evening. This attracted his attention to that wire. Omaha then calling his confederate, unfolded to him, with sundry mysterious remarks, the details of a scheme, which caused the listening Mulcay to gasp with surprise and eagerly drink in every word.

"Yes, sir," says "Om" confidentially to his friend the dispatcher. "It's a big thing; think of it! $250 a month in gold, passes to San Francisco, and free transportation to South America by the Pacific Mail Steamship line! J. J. Dickey, superintendent of telegraph U. P. R. R. is to be Government Superintendent of the Peru Central, and is now organizing a party of fifty first-class operators to go there next week. Keep it quiet and come on at once." Here "Om" closed his key, while the convulsed operators on the line were amazed at the magnitude and apparent plausibility of the plan. His friend replied that "he had already resigned his position as train dispatcher, drawn $1,000 from the bank, and would be there in twenty four hours, as a road had been promised next day." With mutual injunctions to keep mum, they bade each other good night. The effect of this apparent big bonanza was immediately noticed. Mulcay was eager for further particulars which "Om" reluctantly (?) gave, prefaced with numerous glowing opinions of his own. Mulcay promised strict secrecy and to come to Omaha at once, ready, yea, eager, to sacrifice himself to the Peruvian Government for $250 a month in gold, palatial transportation free.

The Omaha villian retired, chuckling with fiendish glee, while his innocent victim built air castles, and dwelt in the seventh heaven of ecstacy until morning dawn. Obtaining leave of absence he hurried to Omaha and modestly presented himself to the astonished Mr. Dickey. He soon came away, however, crossed over to Council Bluffs, giving "Om" office a wide berth, and finally wended his way back to Carroll. Alas! poor Mulcay; he soon learned that he was the victim of a huge sell, and the laughing stock of telegraphic Iowa. He has resumed work as an ordinary telegraph mortal a sadder but wiser man.

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The New York Wire Club.

The hands of the old Dutch clock at No. 90 Sixth Avenue pointed to the hour of nine P. M. on last pay-day when the gavel fell and President Gibbons called the meeting to order. The Chair said that since the previous meeting he had lost a great deal of time; in fact, it was safe to say that his last pay voucher, after deducting the lunch tickets, was for the smallest amount ever drawn by an operator, it was for seven cents. (Applause.) He also wished it placed on record that he had worked the first and last combination instruments with Philadelphia.

Jerry Borst, who upon rising was received in a boisterous manner, said that he had been absent himself lately, but he had supplied subs. Oscar Kraft wished to tell the meeting where he first saw Jerry Borst. "In the days of the old Volunteer Fire Department I was a member of Black Joke engine 29. While going to a fire one night, the machine was run into and upset opposite the Metropolitan Hotel by 12 engine. A good many of the telegraph boys were on the rope of 12, but the figure that stood out remarkably bold and clear was that of Mr. Borst. As the engine rushed past us, his feet seemed not to touch the ground at all, and the fitful gaslight gave him a weird appearance. Ever since that night his name and that of the Flying Dutchman have been synonymous to me." (Prolonged applause.) Returning Board Howlett said that business was picking up briskly. Hayes is a great man. (Confusion.) The Chair rapped sharply for order. He informed the gentlemen present that any one who introduced politics into this club would be severely dealt with. Sergeant-at-Arms Stephenson also frowned darkly upon Mr. Howlett. Mr. Weller called the attention of the meeting to an act of injustice done to Mr. Borst. He alluded to the order which required him to change his sign from "E" to "Bo." He appealed to the members if this was right. (Cries of yes, yes, no, no, and great confusion.) The Chair remarked that there evidently existed a wide difference of opinion on this important subject, and before censuring any one it would be well to lay the matter over for future consideration. Agreed to. Bob Morris stated that during Mr. Bagley's absence from the office last week he had put up a duplex. Mr. Welsh hoped that his wire would never be switched on there. (Laughter.) Mr. Weller just wanted the floor for a moment more. He was now practicing on the new motor, and under Billy Blanchard's directions hoped to add to his limited knowledge.

The Chair announced that a member who did not wish his name mentioned had provided refreshments for the club. Bob Lown inquired the nature of the refreshments. The Chair stated that they consisted of seltzer, lemonade, and coffee, with condensed milk. Tom Allen said he could not drink coffee, it would keep him awake all night. Denis Brown inquired in a sarcastic manner if there was any cod liver oil. (Hisses and cheers.) Morris Brick said he lived in South Brooklyn; it was a long, cold ride. (Applause.) Gus Coleman did not wish to argue the question, "Are Republics Ungrateful?" but he was free to say that the Democratic members of this club were. (Groans.) Mr.

Hallock: Before the meeting adjourns I wish to enter my protest against practical jokes. The day after the Brooklyn Theater fire I happened to be absent, and some one started the report "Hallock has been burned up." It created intense excitement. Fred Baldwin quite agreed with Mr. Hallock. Only a few days ago the curly hair of the handsomest man in the office was ornamented with hairpins. Ed Gordon moved that this club do not accept refreshments consisting of lemonade and coffee. Carried by a large majority. Miles O'Reilly, of the State press wire, then sang "The Harp that once Through Tara's Hall." His effort was well received. John Lenhart, of the Gold and Stock Company, being called upon rendered "The Watch on the Rhine," which was rapturously applauded. Ned Risdon moved an adjournment, which was carried, and the most thoroughly representative body of telegraphers ever assembled peacefully dispersed.

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Washington Notes.

Congress has at last adjourned, the inauguration is over, and "all is quiet on the Potomac." The past two months has covered the most active telegraphic season ever known in Washington since the war. During the months of January and February the amount of press dispatches transmitted from this city far exceeded that of any similar period for many years. During the month of February alone the press matter sent from the Western Union office in this city amounted in round numbers to 2,200,000 words! The greatest number transmitted on any one day and night was on the night on which the electoral count was completed, when it reached 141,000 words, nearly equal to 110 newspaper columns of solid printed matter. During the closing days of the session considerable extra help was called in, as the regular force was pretty thoroughly worn out. The traditional "yellow envelopes" have not yet started out, but may be expected shortly, though nothing is definitely known as to what extent the force will be reduced, and probably nothing will be decided upon until it is known whether or not an extra session of Congress will be held.

Charlie Sands is lying very low with consumption, and probably ere this is printed he will have left us forever. He is quite young, only 21, and has only been confined to his room a month, but the disease has made rapid progress in that short time. He is a member of the Telegraphers' Mutual Benefit Association. Mr. Wm. A. Stewart (Tone) of the Western Union office, this city, was married on Thursday last to Miss Laura V. Smith, of this city, and on Saturday evening the employes of the office to the number of twenty or more made a call upon the bride and groom at their residence, and had a jolly time. "Tone" and his bride had an abundance of good things, to which ample justice was done. We all tender the bride and groom our sincere and hearty congratulations.

Miss Utley, formerly of 145 Broadway, New York was in the city last week, and thinks she would like to remain here, but as telegraphers are a drug just now, it is likely she will not remain.

The Western Union Company has opened an office in the Riggs House, now the *bon ton* hotel of Washington, with "Buck" Barr in charge. He is a son of N. W. Barr, general agent of the Southern Associated Press, and who was an old time operator in the South "befo the wah." The Western Union Company have put up three additional wires between Washington and Baltimore. Quite a number of visiting operators were here during the inauguration week, including Charlie Wier, of Cincinnati, who, it is said, is reasonably certain of a "soft thing" at Washington under President Hayes; Charlie Wolff, of Baltimore; Mr. Bennett, of Albion, N. Y., and others whose names we did not learn. The Corcoran Building, the finest location in the city for a telegraph office, is now completed, and vacant, but no appearance of a move on the part of the W. U. to occupy it. Probably by the time the present force dies of consumption, contracted in this filthy old place, they will save the lives of the forty dollar successors by providing them with a comfortable office. During the inauguration night 132,000 words of press were sent, and the quadruplex, which was put up temporarily, was utilized to make two sending circuits to New York, and worked very well. The W. U. branch office on Pennsylvania Avenue, near Tenth Street, has been closed, and Johnnie Connor assigned to night duty at the branch office near Sixth Street. Ed. Stewart still remains on duty at the Capitol, and may remain there until after the extra session.

End of a Young Life.

On the 27th of February there died, in this city, Annie Cecilia Maguire, a young lady telegrapher of more than ordinary ability, and one whose kindly nature and genial disposition had endeared her, not only to her professional associates, but also to all who were permitted to claim her friendship. Not more than four months ago, Miss Maguire was, to all appearances, in the enjoyment of at least good health; and at the completion of a fortnight's vacation, spent chiefly in a trip to Lake George, expressed herself as feeling unusually well. Shortly afterward, however, she was attacked by a severe cold, accompanied with that warning cough, which, to anxious friends, conveys a tale of sorrow but little suspected by the sufferer. She bore up heroically for a time, and her usual bright face was not missed from her desk in the main office until her failing strength would no longer permit her attendance. Although her illness was brief, her sufferings were most accute; yet throughout them all the serenity of Christain fortitude prevailed, and when at last the dread summons came it found no terrors to triumph over in the breast of her who had "fought the good fight." Miss Maguire was a native of this city, and had been an operator in the employ of the Western Union for about six years. With a mind naturally bright, she possessed no common order of ability and charm of manner; and to those who knew her best, she will long be remembered with love and affection. She was a consistent member of the Catholic Church, her religion finding expression more in deeds than in words; and the strangers who have heretofore experienced her little kindnesses will miss her ever-ready charity. In the office, those of the young ladies who claimed her regard—and who did not?—cannot but feel the gloom that is cast over them by the silence of that cheerful voice, and the absence of that little form that always carried sunshine with it. The vacant desk will soon be refilled, the great business of the company that employed her roll on uninterruptedly; but in the hearts of her friends will remain a void that time alone can heal.

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Telegraphy at Kansas City, Mo.

Telegraphy here dates back to 1858, when the city offered Charley Stebbins, then at Boonville, Mo., a bonus of $3,000 to stretch a wire to this city. Stebbins was then superintendent of the Missouri River Telegraph Co. This was succeeded by the Missouri and Western Telegraph Co., which was afterward gobbled up by the Western Union shark. The increase of telegraph business since the close of the war is marvelous. The Western Union office here is without doubt the finest between St. Louis and San Francisco. Twenty-seven wires run into the main office. There are seven quartette tables and ten "artists." Direct wires to Cheyenne, Galveston, and Chicago. A duplex and a quadruplex. The manager is Mr. M. D. Wood, who is also superintendent of this sub-district. He assumed charge of the office in its infancy, and to his diligence, popularity, and untiring efforts the company is indebted for the rapid increase of business, which is larger to-day than Leavenworth, St. Joseph and Omaha (up-river towns) combined. Mr. Mark Crain, one of the finest, fattest, and oldest operators in the service, is captain of the gang. Mark has been dotting and dashing for nineteen years, and during that time he has accumulated at least a "barrel of money." He will shortly resign and live on the interest.

Now for the operators. Mr. T. G. Rowan works the St. Louis wire; Mr. Chaney Wright a "little fellow," the Chicago wire; Mr. L. C. Stanley, the "tall sycamore" of the office, gets in his work on the Western and Southwestern wires. Messrs. Angle and Brady play with the way wires. The electric cord that stretches from here to Cheyenne is manipulated by Mr. J. E. Storey, who is decidedly the best-looking man in the office. Dr. M. M. Bond is "night chief." Mr. John R. Magill receives "night report," and Mr. John R. Getty repeats it West. Both are all night men. The above galaxy of talent would be incomplete without mention of Prof. W. G. Eccles, who tickles the Northern wires. J. F. Hicks and M. P. Ferris are the bookkeepers. Miss Flora McDill is general, or rather engrossing, clerk. She engrosses the attention of most of the operators. Mr. J. P. Gilday is night clerk, a position of great responsibility. Mr. G. is learning to "[illegible]," and will, in all probability, be a very fair operator within the next ten or fifteen years. John Burke is delivery, and John Dowd C. N. D. clerk. Andrew Johnson is battery man. Financially speaking this is a healthy office, the receipts averaging $800 a week. Col. R. C. Clowry, a gentleman whose equal cannot be found in seven States, is general superintendent, with headquarters at St. Louis. His territory extends from the Mississippi River to the Rocky Mountains, and from the U. P. R. R. to the Gulf of Mexico. The direct Chicago wire established recently was a consummation devoutly wished for. Heretofore the great volume of business for Chicago and the Northwest was transferred at a town near the St. Louis bridge.

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Albany, N. Y., Notes.

Death has been in our midst twice during the past month, taking from us our esteemed friend, John H. Nelson, of the Fire Alarm Telegraph office, who had long been connected with the telegraph service in this vicinity and made hosts of friends who mourn his loss. The other was Willie, four year-old son of Mortimer Walrath, repairer for the W. U. in this city. Mr. Walrath has the warmest sympathy of his many friends here in this sad bereavement. We are glad to know that Iowa could not hold William Gage, formerly repairer for the Western Union in this city, and that he has returned to remain with us, accepting a situation with the American District, which, by the way, has become a solid institution in Albany. We are satisfied its wires will never want for proper care in the hands of Mr. Gage.

Upon the announcement of the death of *The Telegrapher*, the side of the quad worked by Mr. Coates, the faithful agent of that sheet, was properly draped in mourning. Go where you may and you will find representatives of the telegraphic fraternity. Even in the New York Legislature we find Mr. J. Robert Moore, the popular manager of the Trenton Falls, N. Y., W. U. office, acting as member of Assembly from the Fourth District of Oneida County, and J. R. Van Wormer, of the W. U. in this city, as private secretary for the Speaker of the Assembly.

At a recent meeting of the Albany Board of Fire Commissioners John P. Brayton of the W. U. office was appointed fire alarm operator in place of J. H. Nelson deceased. This is a streak of good luck for Johnnie and he has our best wishes, though we shall greatly miss his smiling countenance within the walls of the W. U. office. The Albany *Post* has the following on the appointment:

GOOD FOR BRAYTON.—John P. Brayton was appointed fire alarm operator last evening, in place of the late Prof. Nelson. John P. will be ready with his quail on toast and for congratulations and smiles this evening at the "Windsor." Encores on cigars and blue glass cocktails allowed. All summer and horse car stories will be referred to the debating society. No chromos given with the entertainment. Invitations are now out.

XYZ.

Telegraphic matters in the W. U. office are rather quiet just now, especially on Legislature "off days." In order to give the boys something to talk about during the lull in business, some one "understood we were going to be moved, that the landlords were going to raise the rent, and the Western Union would not pay it." Immediately there ensued a discussion of the merits of various places for the office, each man feeling very sure that his place was the one. But we can't discuss this subject any more, for, like the periodical scares of "automatic," "Vanderbilt buying out Western Union," etc., which used to appear in the defunct "organ," it has all ended in smoke, and we are to stay where we are. There is quite a race for the position in the Fire Alarm office left vacant by the death of Prof. Nelson, and if we may judge from the number of Fire Commissioners each man has got "sure" for him, there will be something less than a dozen. After the first of March the Legislature will hold three evening sessions a week, thus giving the boys a chance to scoop in a little extra, which thus far has been as scarce as hens' teeth. The telegraph office at Glens Falls, N. Y., has just been removed to the office of the Rockwell House. It is tastily fitted up with ash and black walnut counters, surmounted by a neat iron railing, and furnished with new instruments, batteries, and all the modern accessories to convenience and comfort, and is one of the finest hotel offices in the State. It is in charge of Mr. F. M. [illegible].

Yours truly, BILLY BUMPUS.

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The storm last Friday played sad havoc with the wires in various parts of the country, in some cases prostrating poles by the dozens. Communication was interrupted with Canada for a considerable time; business for the Dominion and for Boston, etc., had to repeated at Rutland, Vt.

THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

March 15th, 1877.

WHEN requesting a change of address, subscribers will please give their *former* as well as their present address.

AMONG other places THE OPERATOR is regularly on sale in this city at the corner of Broadway and Liberty Street, at the corner of Broadway and Fulton, in front of the Western Union Building.

MR. TALMAGE'S sermon to telegraphers, notice of which appeared in last issue of THE OPERATOR, has been postponed until Sunday next, March 18th. We hope that all the members of the fraternity in this vicinity, who can do so, will be present. Service commences at half past ten. Be on hand early.

OUR English contemporary, the *Telegraphist*, is a neat little sixteen-page paper, devoted to telegraphic science, fun, literature, and gossip. The price, postage prepaid, is only seventy-five cents a year. Those who desire to order can forward the money to this office, or direct to the editor in London. Specimen copies on receipt of stamp.

WE have received from Mr. George B. Prescott a copy of "Electricity and the Electric Telegraph." (New York. D. Appleton and Co.) This is a work which should find its way into the hands of every telegrapher in the country who has the ambition not to remain a mere machine in the service. The book is decidedly the most complete work on electrical science in any language. It contains 978 pages, with more than five hundred excellent wood cuts, and is well printed on fine paper and handsomely bound. The work is in reality a history of electricity and telegraphy, complete to the present day. Mr. Prescott's position, and the information to which he has access, render the book very authentic. The price, prepaid, is five dollars. Those desiring a copy can send their order to this office.

THE cable war continues. The Anglo American, working three cables, and whose capital has been "watered" until it now amounts to $35,000,000, thought it could bully the little Direct Company with its single cable and capital of only $4,000,000 into amalgamation, but completely failed. It then reduced the rate to twenty-five cents a word, to spite its rival, but the plucky little Direct immediately did the same, and seems determined not to countenance a monopoly in Atlantic cable business. A cable dispatch, dated London, March 2d, says that the Master of the Rolls has decided in favor of the amalgamation party, in an appeal from the decision of the secretary of the Direct Company, in throwing out a number of Anglo-American votes. This indicates that the rival companies may after all reach an arrangement at an early day.

TELEGRAPH EMPLOYES AND THE WESTERN UNION

The new editor of the Western Union official organ tries to convince us that the welfare of telegraph employés and the Western Union Company is identical. This is the way he argues:

> There is a certain amount of telegraphing to be done, and this is not materially increased or decreased by division among two or more competitors. It certainly costs more to maintain two or more organizations for the purpose than it would if the business were concentrated in a single enterprise, and the amount of the receipts which can be invested in compensation to those practically engaged in its transaction must be apportioned accordingly.

Bless your unsophisticated heart, Mr. Ashley, the salary of Western Union employés depends very little upon the company's prosperity or adversity. The net profits of the Western Union for the six months immediately preceding the famous "sliding scale" were $1,752,781. 90, being $91,451. 48 in excess of the profits for the same period in the preceding year. For the fiscal year preceding the reduction, the net profits were $3,229,159. 83, being an increase of $722,239. 68, over the profits of the preceding year. Last year the net profits were increased $170,350. 14, but somehow "the amount invested in compensation to those practically engaged in its transaction" was not "apportioned accordingly."

We once heard of an amiable old gentleman, who thought that boys should be whipped every time you meet them. "If they are not coming out of mischief," was his very plausible argument, "depend upon it they are walking right into it, and deserve to be whipped any way." The Western Union Telegraph Company seems to follow this doctrine implicitly. If its net earnings are particularly large, and business lively, it reduces the salaries of its employés, so that it can pay its stockholders a larger dividend. The net profits were never so large since the organization of the company, as they were immediately preceding the declaration of the obnoxious "sliding scale." If business is dull and unremunerative, the company advocates a proportionate reduction of salaries, and if competition reluctantly compels reduction of rates, it believes that the salaries of employés should be reduced to make up the deficiency.

No sir, the past conduct of the Western Union demonstrates conclusively that to give the company exclusive telegraphic privileges in this country, would be neither to the interest of telegraphers nor the public. The Western Union has no claim upon the generosity of either, and the sooner it realizes that fact the better. Let it stop throwing mud upon its competitor and beseeching its employés, with tears in its eyes, not to "applaud or encourage competition". It can find better employment in trying to retain as much of its present business as it can. The only way it can do this, in our opinion, is by studying the interests of the public, and paying its employés salaries upon which they can live. There is, and will continue to be, ample business in this country for two telegraph companies, and when the A. and P. completes its 10,000 miles of new lines, which it claims will give it nine-tenths the facilities of the Western Union, there will still be business for both. Telegraphing has become a fixed institution, and is constantly and steadily growing.

The Western Union's foolish and spiteful attacks upon the A. and P. are puerile and undignified, and from the fact that the latter company has no official organ through which to present its side of the story or reply, we consider them very unmanly. "It is excellent to have a giant's strength, but tyrannous to use it like a giant." Had the Western Union, in its prosperity, remembered the men to whose faithfulness and devotion to duty it owed its success, and not wantonly trampled upon, and, with the iron heel of its oppressive "sliding scale," ground them, as it were, in the dust, it might have some excuse for appealing to them. But it ungenerously took advantage of the general business depression to wrest a portion of the bread and butter from its already miserably paid employés, at a time when its net profits were one third the gross receipts. Had the company showed one particle of consideration for its men, and made them feel that in reality its welfare and theirs was identical, and had afterward its prospects become clouded on account of competition or unremunerative business, these very men would have been thankful for the privilege of rallying around in its hour of trial and working for almost nothing until its business prospects brightened. But it has done everything in its power to crush the manhood out of the telegraphers of America, and it is more than can be expected of human nature to lick the hand that scourges it. "The poor beetle, that we tread upon, in corporal suffering feels a pang as great as when a giant dies." Even operators, whom the Western Union seems to regard as pieces of machinery, out of which for a time it makes money, and afterward discards as it would a worn out relay or key, have feelings such as actuate the breast of the pompous stockholder they are wearing out their lines to enrich.

"To do telegraphic business promptly, accurately, and satisfactorily," the *Journal* very truly says, "requires the employment of the best available talent." The interest of telegraph companies does not lie in the employment of inferior and ill-paid labor." "Best available talent" is good. We very much regret to say that in consequence of the miserable pittance doled out as salaries by the magnanimous Western Union, the "best available talent" is slipping gradually but steadily out of the business, and finding more congenial and remunerative employment elsewhere. Our attention was last week drawn to a sheet of news received by a sample of the Western Union's "best available talent." The chirography would have made even Horace Greeley blush. An eight-year-old school-boy might easily have rivaled it, without half trying. No wonder business is bulled; no wonder the telegraph is falling into disrepute, and beginning to be regarded by the public as a gigantic piece of guess-work; no wonder the Western Union is constantly overwhelmed with lawsuits. It cannot be otherwise so long as such salaries continue. It is utterly impossible to obtain men of judgment, or persons who will take an interest in the business at $35 or $40 a month. A rural artist wanted to try city life. Armed with a letter from his superintendant, setting forth that he was a strictly first-class man, he came to New York, called upon a representative of the Western Union, and stated his errand. "We want a first-class man," said the representative, patronizingly; "now, my friend, what is the very lowest possible sum you can afford to work for? "I think," replied the applicant meekly, "that $35 a month is the very lowest amount I could name," and he looked up at the representative abashed, and trembled, lest he might have asked too much. "Well," replied that gentleman, slowly, and with seeming reluctance, "we require your services badly, and if you will not work for less, why I suppose we must give you that salary." And the ambitious rural artist lifted up his heart in gratitude at being permitted to take Washington specials and the consumption on a salary of $35 a month. This is what the Western Union calls "best available talent." The company does not consider it to its interest to employ "inferior or ill-paid labor." Oh bless your soul no; it wants the "best available talent"—at $35 a month.

The editor of the *Journal* does not appear satisfied with his salary. He says: "Very few of us receive all that we consider ourselves entitled to, or would like to obtain for our services," but he takes comfort in believing that "in telegraphy, in the future, brains will be at a premium." Probably they will, but their appreciation and the millennium will occur about the same time. At present they are quoted at only 35 per cent. of their par value, with few takers. Mr. Ashley closes the article by seriously assuring the reader that "the best interests of telegraph employés in this country are indissolubly connected with the continued prosperity of the Western Union." What downright impudence! Does the Western Union look upon the telegraphers of America as a lot of schoolboys or six-year-old children, that it expects them to swallow this? If it does, it is mistaken. Telegraphers do not find it easy to forget the company's magnanimous "New Years' present" on the first of January, 1876; nor did President Orton's implied compliment, in his last annual report, quite obliterate it from their memories.

"You may break you may shatter the vase if you will,
But the scent of the 'sliding scale' hangs round it still."

* * *

Lightening Flashes and Electric Dashes.

Work on the new book progresses very satisfactorily. It is quite certain now that the book will be the most interesting, entertaining and enjoyable telegraphic work so far published. A glance at the names of the contributors will satisfy any one on that point. Nearly all the articles have been written especially for "LIGHTNING FLASHES," and are in the happiest style of the several brilliant writers. The book literally overflows with pictures, drawn and engraved for it, by telegraphic artists of no mean merit. Oney Gagin's story "Leander's Tour of Investigation;" Nuf Ced's "Wives for Two; or Joe's little Joke;" Charles Barnard's "Kate; an Electro Mechanical Romance," with four illustrations; "A Reminiscence" (illustrated) by Werner, and several other articles, have been put in type since last issue.

We would remind our readers that copies of the book can be ordered at once, which will be mailed immediately on publication. The book, beautifully bound in full cloth, will be an ornament to any telegrapher's library or parlor table, and for a present to a friend nothing could be more appropriate.

* * *

MR. MAURICE STRAKOSCH announces three public performances on Elisha Gray's telephone, at Steinway Hall, this city, on the evenings of April second, third, and fourth. Musical melodies are to be performed in Philadelphia, and distinctly heard by the audience in New York. It is promised that several of the most eminent artists in America will appear in the telephone concert.

Telegraphy in Theatrical Plays.

Telegraphic scenes and incidents are beginning to be introduced quite extensively in theatrical plays. In Rowe's "Fifth Avenue," recently played at Booth's Theatre, the Hudson Iron Works are represented as being connected by a private wire with the president's mansion on Fifth Avenue. The president receives an order from the Government to construct a number of monitors, and wishing to consult with the superintendent, Mr. Blake (George Rignold), telegraphs that gentleman to come down. One would suppose that this would consist of tapping a few nonsensical and monotonous dots on the key, but it does not. We were agreeably surprised to find that the conversation was carried on in *bona fide* and very excellent Morse. From the dress circle we read quite distinctly, after the Works had been called and duly responded, "Send Blake down," and the answer, "Blake not at Works." After this had been acknowledged the operator at the Works closed the conversation with "i," just as natural as if he had been working with Chicago or Philadelphia. It is evident that there is an operator somewhere on the stage. Blake finally comes in, and after his departure two burglars surprise and kill President Schuyler. They then make off with the contents of the safe. Schuyler, though mortally wounded, manages to crawl over to the telegraph key, and in Morse characters writes, "Murdered by Bl——, then falls back dead. The murderer Blogg and his companion are finally arrested for the crime, and confess.

We learn from European papers that a sensational piece called "A Drama on the Sea-bottom" is now being played in Paris, the plot of which is, briefly:

A French engineer, Sartene, loves the daughter of an American millionaire, Reginald, who embarks for Europe in the "Washington," with the view of selling a large number of valuable diamonds. The ship is burnt, and he and his wife are lost. This forms the first scene. Sartene has found in an American engineer, Morton, a rival for the hand of the fair Emily. These two sail along with a third engineer named Karl, in the "Great Eastern," to lay a telegraph cable between Europe and America. Out of malice Karl cuts the cable, and frustrates the expedition. The "Great Eastern" has to come to anchor and seek for the severed ends on the sea-bottom. The three engineers, along with a marine, in diver's costume and provided with a Bazin lantern, are seen descending from the bowsprit into the water by a rope-ladder (the decorations representing the sea are made gradually to rise), while an electric light illuminates the scene, showing a number of fishes, etc. On reaching the bottom they find a quantity of wreck and some corpses; among the latter those of Emily's parents. Karl is caught by Sartene in the act of "annexing" the case of diamonds. Thereupon he promptly cuts with his ax the caoutchouc-tube which supplies Sartene with air, and the latter is carried off by the water. So ends the drama proper on the sea bottom. Morton is afterward accused of the murder of his rival, and the case is likely to go against him, when Sartene, who has been wonderfully rescued, turns up for his deliverance. The piece closes with Sartene magnanimously giving up all his claims to the hand of Emily in favor of Morton. Karl, hunted by the police, flings himself from a precipitous rock into the sea.

* * *

Want of space compels us to hold over a very interesting story from the pen of Mr. H. Van Hoevenbergh, entitled, "Into the Jaws of Death," as well as a large number of other articles. We shall publish another sixteen page paper April 1st, and hope to work in much of the matter on hand.

Themes for the Thoughtful.

Reading without reflection will never make a man wise.

A man may play the fool in everything else but poetry.

We darken our own lot, then call our sorrows destiny.

Moments sometimes make the hues in which years are colored.

From the follies of youth usually spring many of life's after sorrows.

He who assumes to be what he is not, will inevitably become nothing at all.

As charity covers a multitude of sins before God, so does politeness before men.

He who cannot conceal his vexation, makes himself a laughing-stock for his enemies.

The surest and most speedy road to distinction is the diligent cultivation of natural tact.

Conscience, when once hushed to sleep, may rise to torture, but will wake no more to save.

Men are seldom struck with incongruities in their own appearance any more than in their own conduct.

The heart that has something to love, and is loved in return, can never be utterly and remedilessly wretched.

Good breeding is benevolence in trifles, or the preference of others to ourselves in the little daily occurrences of life.

If man is as passionate, malicious, resentful, sullen, moody, or morose, after his conversion as before it, what is he converted from or to?

If we would amend the world, we should amend ourselves, and teach our children to be not what we are ourselves, but what they should be.

Prayer among men is supposed to change the person to whom we pray; but prayer to God doth not change Him, but fits us to receive the thing prayed for.

I give it as my deliberate and solemn conviction that the individual who is habitually tardy in meeting an appointment will never be respected or successful in life.

Every one that has been long dead has a due proportion of praise allotted to him, in which, while he lived, his friends were too profuse and his enemies too sparing.

No man can hinder our private addresses to God; every man can build a chapel in his breast, himself the priest, his heart the sacrifice, and the earth he treads on the altar.

We pray for trifles without so much as a thought of the greatest blessings, and we are not ashamed, many times, to ask God for that which we should blush to own to our neighbor.

Men and statues that are admired in an elevated situation have a very different effect upon us when we approach them. The first appear less than we imagined them, the last bigger.

A copious manner of expression gives strength and weight to our ideas, which frequently make impression upon the mind as iron does upon solid bodies, rather by repeated strokes than by a single blow.

True resignation, which always brings with it the confidence that unchangeable goodness will make even the disappointment of our hopes and the contradictions of life conductive to some benefit, casts a grave but tranquil light over the prospect of even a toilsome and troubled life.

Pleasure, when it is a man's chief purpose, disappoints itself, and the constant application to it palls the faculty of enjoying it, though it leaves the sense of our inability for that we wish, with a disrelish for everything else. Thus the intermediate seasons of the man of pleasure are more heavy than one would impose upon the vilest criminal.

There are hours in which the mind of a literary man is unhinged, when the intellectual faculties lose all their elasticity, and when none but the simplest actions are adapted to their enfeebled state. At such times Bayle kicked at chairs, and the Jewish Socrates, Moses Mendelssohn, stood at the window and counted the shingles on his neighbor's house.

Stealing Lightning.

On Monday last the operators of the American District Telegraph Company at the main office, corner of Calvert and Baltimore streets, Baltimore, were much surprised at the singular freaks of their instruments. Calls innumerable and spasmodic clickings were heard all the afternoon and the call bells kept up such a distracting ringing that the office was soon in a state of excitement and distraction. Various theories were advanced to explain away the mysterious sounds. All kinds of tests were made, but with little success. At night they stopped, but the next day the instruments were at it again with renewed vigor, and all the clerks began to wear a troubled look as if pursued by some ghostly visitant. All Tuesday the strange clicking continued, and nothing could stop it. The thing was becoming serious. The "loop" over which the mysterious messages came was that connecting all the boxes in the central part of the city with the main office, and, of course, a very busy one; but so long as the unknown operator held the wire not a call could be sent. At last, on Wednesday, the expert ear of Mr. Haller, one of the managers of the office, detected what he thought to be several letters of the Morse alphabet, and at once a happy thought struck him. He switched a Morse sounder on to the loop and then the trouble became plain. Some person had carefully attached a Morse instrument to the wire and was diligently practicing the alphabet. Mr. Haller saw that he was a learner, and he interrupted a dispatch about "M-a-r-y h-a-d a l-i-t-t-l-e l-a-m-b" with "Who are you?"

The clicks stopped, but presently came the prudent reply, "No you don't—that's too thin!" Then followed an interesting conversation, in which Mr. Haller did his best to find out the exact location of his correspondent. After awhile he hit upon a clever plan. The person was evidently a beginner, and he would be apt to jump at an opportunity to learn the art from a professional instructor; so with some well-put phrases of flattery, he proposed to the person at the other end of the wire to give him some lessons. The plan was a success, the ambitious young operator biting at the tempting feast with avidity. After some conversation over the wire it was decided that the two (Mr. Haller and his pupil) should meet on Thursday evening and arrange preliminaries. They accordingly met last night at the corner of Charles and Lexington streets, and Mr. Haller pretended to be so well pleased with his pupil that he promised to put a special wire from the Western Union Building to his office and purchase new instruments for his practice, all thrown in with the terms of tuition. All this the flattered youth—for it was a youth—swallowed with wonderful simplicity, and it was only necessary then for Mr. Haller to ask him where he belonged to learn that he was a clerk in one of the daily newspaper offices of this city. The bubble then burst, and with a severe lecture from Mr. Haller for tampering with what did not belong to him, the young man was permitted to go unpunished.

A Voice from Hoosier-Pan-Handle dom.

During my short but pleasant acquaintance with THE OPERATOR I have been content with the [illegible] of its contents, until now, having read the "Brilliant Suggestion" of the old Georgia "Plug," I am seized with a sudden and unquenchable desire to be devoured. Not that I would wish to have greatness thrust upon me by having my handsome profile occupy a place in THE OPERATOR, but merely a desire to benefit humanity as represented (or misrepresented as Warner would put it) in the average "plug."

Firstly, don't let's "buy the Western Union." We would never be able to stand so much prosperity. Operators as a class, judging from experience, never have been able to stand any great amount of wealth being heaped upon them without being seized with a desire to storm it with "Mike Kelley" or some other retailer of the "[illegible]," and so it will ever be, I fear, while time and Morse manglers last. It is not to be doubted as Warner has often told us, that we could "bull it," but telegraphic history fills its warning voice saying that our patrons, the public, would not "bear" it, at least not very submissively. Oh, no, the scheme is too good—at least for this generation. There are many reasons why we shouldn't do it, but I haven't time to go farther. The one "suggestion" has already done mischief enough in my family. My wife who always reads THE OPERATOR, has become alarmed lest I with other "plugs" should be hoisted by my boot-straps into a high position in this co-operative plugaphic company, such as director (salary $5,000) or general superintendent (salary $4,000), and thereby be kept away from her and our little family of nineteen local sounders, on business of the company, and prays continually that this "cup may pass." Another objection to this greatness is that the Pan Handle, to whom I have the honor to be agent and operator (salary $50) at an important station (population 500) could ill afford to part with me, for I know (if you don't) that our superintendent (salary $8,000) sets great store by me, and my chief train dispatcher (salary $115) would mourn my loss and refuse to be comforted.

Oh, no. 'Tis ever better so,
Let's no [illegible],
Let's battle ahead till we are dead,
And die the death of a plug.

P. HANDLE MOSSBACK.

A Fire at Toledo.

The day is clear, but cold. To warm it up they are trying to get up a first-class fire in the Chamber of Commerce, one of the finest buildings in the city. The building is now being drenched with water to cool it off. So we go, from one extreme to the other. The alarm was given between the hours of one and two o'clock, caused by the discovery of smoke issuing from the mansard roof of the magnificent Chamber of Commerce Block. The fire engines and hydrants were at once called into requisition, and before it had made much headway —indeed, it may almost be said that the fire exterminators did their work too well. For through zeal in pouring on water the upper floors of the building were completely flooded. The fire originated in the interior of the mansard immediately above a room next to the Western Union Telegraph Company's battery chamber, but the two are entirely disconnected. The damage by the flames is slight, being confined almost entirely to the roof. But the damage done by flood is much more serious, and extends two stories down. The signal office was completely deluged; some very costly instruments were injured and many papers hopelessly ruined. The official records, however, were not harmed. The operating room of the Western Union Telegraph Company on the floor below sustained but little damage. It is impossible now to give the amount of damage done by the water, but enough is known to make it certain that it will be no trifling sum. Since I am writing, it may be well for me to say that since the personal in last issue in reference to J. W. G. I am pleased to state that I have found out where he is. So much for THE OPERATOR. May it live long and grow larger is the best wishes of Yours, G. Z. F.

TOLEDO, OHIO, Feb. 20th.

Further Reduction of Rates by the A. & P.

In addition to the reduction of rates made by the A. & P. on the first of March, already reported in THE OPERATOR, the company further simplified its tariffs by adopting from March 5th three rates only east of the Mississippi River. They are twenty-five, thirty-five, and fifty cents, and certainly do not appear exorbitant charges for the service. The A. & P. claims that the several reductions have been affected gradually as the facilities of the company increased and its ability to carry business has been demonstrated. Each reduction has resulted, it says, not only in an increase of business, but also of revenue. The present system of night messages at half rates is to be discontinued. Twenty words will, however, be transmitted at night, for delivery the following morning, for the price of a ten word day message, under the same conditions in other respects as half rate night messages were hitherto accepted.

The A. & P. announces that additional facilities between New York and Chicago and St Louis will be available within about thirty days, when further reductions tending to a uniform rate will be made. It also boasts of being free from bonded or floating debt, with ample means in its treasury, and of having made arrangements for the construction of about 10,000 miles of new line as rapidly as the material can be supplied for the extension of its system to New Orleans, Mobile, Savannah, Charleston, Richmond, Norfolk, and other principal cities in the sonth, and for increasing its facilities all over the country. The question of cheap telegraphy, President Eckert says, depends upon such recognition and liberal patronage on the part of the public as will justify the Atlantic and Pacific Telegraph Company in pursuing the course it has adopted during the past year.

The Western Union has been compelled to reduce its rates to points reached by the A. & P. to correspond with those of that company. The A. & P. has very much the advantage in these reductions. They are gratuitously advertised in all the city papers, but when the Western Union comes down to the same tariff the public do not seem to hear much of it. Many, therefore, patronize the A. & P. under the impression that the Western Union rates are higher.

More Stock Jobbing.

A circular addressed to the directors of the Western Union Telegraph Company was distributed in Wall Street on Saturday stating that James C. Spencer, at No. 287 Broadway, was the representative of clients who owned a large amount of the bonds and stock, and who objected to the payment of a quarterly dividend this week, on the ground that the company had no surplus to divide in this way. It quoted from the last annual report to show that it cost 35 cents to send the average message, and declared that as the present "competitive rates" were not above this figure, any showing of profits was apparent and not real, and consequently a fraud upon the public, according to the statute.

Western Union officials characterize the circular as an effort to "bulldoze" Western Union. They think Spencer's clients are the same persons who tried to "bear" the stock by an injunction last Summer. More than likely Jay Gould is short of Western Union stock. The dividend has not yet been declared, but the directors are to meet to-day (Wednesday), and will probably declare a quarterly dividend of 1½ per cent.

Echoes From 197.

W. S. Lewis is in the city.

McLaren Campbell has arrived in New York.

Frank Rae sails for California to-day, March 15th.

George Cumming, of the night force, has become deranged on the subject of religion.

E. T. Barberie, from St. John, N. B., has been appointed operator on the main office night force.

The Manhattan Quotation Telegraph Company moves up from 18 New Street to 197 Broadway on the first of May.

Thomas J. Landy, of the Scranton wire had an addition to his family last Saturday. It was a boy of the respectable weight of eleven and three quarter pounds.

On Tuesday morning Dennis Brown came into the office his face wreathed in smiies. A bouncing young gentleman has been added to his family. Third addition.

Mr. George S. Brownson, who has for several years past worked in the Western Union main office on the Philadelphia and Washington Morse circuits, has resigned. The young gentleman is a first-class telegrapher, and has in him all the elements which go to make up a man with a future. Mr. Brownson leaves the office with the friendship of every operator of his acquaintance, and, it is safe to say, that he has not an enemy in the service.

Oney Gagin.

We take the liberty of publishing the followin note, which accompanied Oney Gagin's new story "Leander's Tour of Investigation," written for "Lightning Flashes":

DEAR JOHNSTON,—There, I have got this finished at last. My health has been very poor, but, I think, is improving some. I propose to take a vacation this summer, and lie round under the apple trees in the country to see if I can get back my health. Sorry I haven't been able to do more for you, but my office work nearly exhausts me every day, and I come home tired and worn out. THE OPERATOR is looking up wonderfully lately. I heard it remarked by several that the last issue was enough to pay for a year's subscription. It was an excellent number. Success to you. Yours always,

D. C. SHAW.

Telegraphic Improvement at Syracuse.

That remarkable invention, the duplex repeater by which messages at the same time can be passed in opposite directions over the same wire, and one operator can do the work of four, has been placed in the Atlantic and Pacific office in Syracuse, and, we presume, will ultimately find its way into the telegraph offices in this city. The duplex repeater consists of two relays, four sounders, and four keys. The main battery in connection with the instrument consists of two hundred and thirty cups, each with a capacity of one gallon, and each costing not far from twelve shillings at wholesale. A local battery of eight cups will soon be added in Syracuse. A barrel of blue vitriol was used to start the battery, which will give an idea of its size and power—*Binghampton Times.*

* * *

Jim Ashley, too! How a change of administration does wake up the political mummies!—*Springfield Republican.*

Can Mr. Bowles have reference to our esteemed friend of the *Journal of the Telegraph?* Yes, a change of administration works wonders. For instance, read Mr. Ashley's editorial in last issue of the *Journal.*

Dashes Here and There.

A Flint, Mich., correspondent of the Detroit *Tribune* writes: "The management of the Atlantic and Pacific Telegraph Company are in correspondence with one of our prominent business firms here with a view to some local co-operation in the establishment of a competitive line from Detroit hither, and thence through the Saginaw Valley. The proposition meets with a good deal of favor here, and doubtless will receive the desired support."

The A. & P. Co. have recently purchased the Hawkeye Telegraph Co.'s lines along the C. R. R. of Iowa, extending across the State from Albia to Northwood, a distance of two hundred miles. This line intersects their main east and west circuit at Grinnell, Iowa. It is also reported this company intend during the coming season to erect a line along the route of the C. B. & Q. R. R. from Albia to Burlington, and probably south to Keokuk and Quincy, Ill.

THE ASSOCIATED PRESS MAN.—"Can't stop; I'm in an awful hurry," said a talented agent of the Associated Press this morning. "Must get to the office right away to send off the news. Yellow dog poisoned at the South End and runaway team broke a store window on Hanover street." And the electric wire flashed the tidings over this broad continent. The colored voter of Louisiana wept over the fate of the yellow dog, and the frontiersman amid the wilds of Oregon laid aside his ax to read the thrilling account of the runaway. Such are the subtle links which knit mankind in firmer bonds of brotherhood.—*Boston Traveller.*

IT would be well if the telegraph warfare on the Western Union, now waged by the Atlantic and Pacific, could reach this point. The Western Union is entirely too independent and domineering. If the A. and P. will reach Pollard with their lines, they can control nearly all the business from Pensacola, by making connection with the Pensacola Telegraph Company's lines. The warfare between the Atlantic and Pacific and the Western Union appears to be damaging to the latter. We look to the decline in their stock as good proof that they are suffering. We see it now quoted 69¾, which is a decline of 10 per cent. or more within a very short time, and the decline has been gradual. If the Atlantic and Pacific fight well, the Western Union will continue to decline. *Pensacola (Fla.) Herald.*

An amusing episode connected with the Dominion Company happened at Montreal a short time ago, which is too good to pass unnoticed. The D. T. Co. built two wires to that city, one Boston and New York and one Direct Cable wire. To make the connection with the city office it was necessary to lay a cable across the St. Lawrence River. By some oversight the cable was a single wire only. Finding this out, the superintendent of repairs telegraphed to the electrician at Toronto inquiring if the cable could not be duplexed. That official replied in the affirmative, probably laboring under the impression that a wire was to be duplexed through. Of course the superintendent found out he could not duplex a single wire cable to work two wires through it, and a new cable had to be laid.

THE TELEGRAPH IN A NEW ROLE.—A rather peculiar use of the electric fluid is reported from Florida, that of calling a doctor to prescribe for a patient by telegraph. Yesterday, says the Pensacola *Herald*, a sick child of Mrs. Davis', at Molino, required immediate medical aid. There was no doctor at Molino, so the wires were put to work, and in a few minutes Dr. Pickard was called to the Pensacola office, where, with the assistance of Mr. E. Gale Quina, operator at the key in Pensacola, and Miss Lena S. Conn, operator at Molino, he prescribed for the child. We are glad to learn that under the treatment of Dr. Pickard, assisted by Mr. Quina and Miss Conn, the child is better. So you see that in sickness as well as in health the telegraph can be put to good account in more than a commercial or ordinary business way.

Cipher messages are always more or less perplexing to the telegraphic fraternity, but the following one proved to be above the average. A gentleman recently stepped into a telegraph office in one of the large cities in Missouri, wrote out the following message to be sent to an eastern city, and handed it to the operator, who is a lady: "Darling, kick glutton to-day." The lady gazed at it in amazement, nor was her surprise any the less when a reply was received which said, "Kiss glutton to-day." The gentleman called for his reply, whereupon the lady closely examined his appearance, wondering whether his mind was not impaired. He realized the situation, and in a few words explained that the first message as understood by the firm would read, "325 brls. must be shipped to-day," and the reply, "Will ship to —— to-day." The explanation proved satisfactory, and both enjoyed the joke, as did also UNO HOO.

A CABLE GRAPNEL.—At a recent meeting of the British Society of Telegraph Engineers, a new form of cable grapnel was exhibited by the Western and Brazilian Telegraph Company, and explained by Mr. A. Jamieson. Cable lifting being an operation moved far beyond the sphere of ordinary observation, most people are ignorant of the peculiar difficulties by which it is surrounded. Of these, the breaking of grapnels is one of the most frequent and serious, and Mr. Jamieson's invention is designed to overcome this difficulty. The ordinary grapnel is furnished with rigid prongs, which, although perfectly well calculated to seize and bring the cable to the surface, are also liable to become fastened to rocks and other substances, and to break with the slightest strain of the ship. Of such frequent occurrence is this, indeed, that all cable ships are compelled to carry a very large stock of grapnels on board, and have often to return to port without accomplishing their task, owing to loss and breakage. Mr. Jamieson has furnished his grapnel with hinged prongs, governed by a spring, which yields at a given strain, so that the moment a rock is "hooked" the grapnel slides off and comes to the surface. It is, in fact, an octopus-like machine, which puts forth its "feelers" in search of the real article, and draws them back the moment any counterfeit substance seeks to entangle them.

PERSONALS.

The world telegraph lines extend over 400,000 miles, and there are 160,000 miles of railroad.

Miss Flora McDill has been appointed general clerk of the Western Union at Kansas City, Mo.

Mr. James Foster is at the Wellard House, M. T. Co.'s office, St. Catharines, Ont., and doing a good business.

Mr. C. L. Antisdel, Canal and Harrison streets, Chicago, Ill., desires the present address of Harry C. Welch.

Mr. Giles, formerly an operator of 145 Broadway, this city, was ordained at the Catholic College Suspension Bridge, N. Y., February 24th.

W. H. Dolbear officiates as manager and Fred L. Robbins as day operator at Keokuk, Ia. Geo. H. Wheelock is manager and Frank Gregson operator at Ottumwa, Ia. Oskaloosa is ably managed by Miss Mollie Huges.

J. W. Waite, formerly employed as operator on the B. & A. R. R., has been appointed night operator in the F. R. R. train dispatchers' office at Fitchburg, Mass. Mr. Waite formerly worked the quad at Ashburnham Junction.

It gives us pleasure to chronicle the fact that Watts-his-name, "Yosef," formerly of Detroit, has at last succeeded in reaching the golden summit, that is to say, is working for the C. P. R. R. at Summit, Placer County, California. We should be pleased to hear from you for THE OPERATOR, "Yosef."

The last number of THE OPERATOR a periodical published in New York in the interests of telegraphers, speaks of the new Union Depot operator as "Patsy O'Neil, an Italian from France." Mr. O'Neil says his nationality is misrepresented in the above personal, that he was born in "Ellinoy."—*Kansas City Journal.*

WESTERN DIVISION PHILA., AND ERIE NOTES.—The main office at Erie is represented by Chief Scobell, with dispatchers Henry, Shatto, and Curtis, assisted by Messrs. Grace and Hickey. Billy Wagner officiates at Erie yards, to the satisfaction of all. Billy is well liked. At Corry, Mr. Chidester is the gentlemanly manager, assisted by Mr. Atherly. At Irvineton we find Mr. Dave J. Wells, the gentlemanly and efficient manager of the P. R. R., Oil Creek, and Western Union. Dave is a fine fellow and highly esteemed by his associates; the boys always know when he is at the key, too. Mr. M. S. Connors is in charge of Warren office, assisted by Miss S. H. Cole. Mr. Skelly is the manipulator at Kane, east end of Div. Mr. S. is a gentleman and a first-class man. He is assisted by Mr. Small. Among the first-class men on the Division at present are, Messrs. Grace, Hickey, Wagner, W. Jeffery, Wells, Connors, Craig, Skelly, and others. The Division is ably conducted throughout.

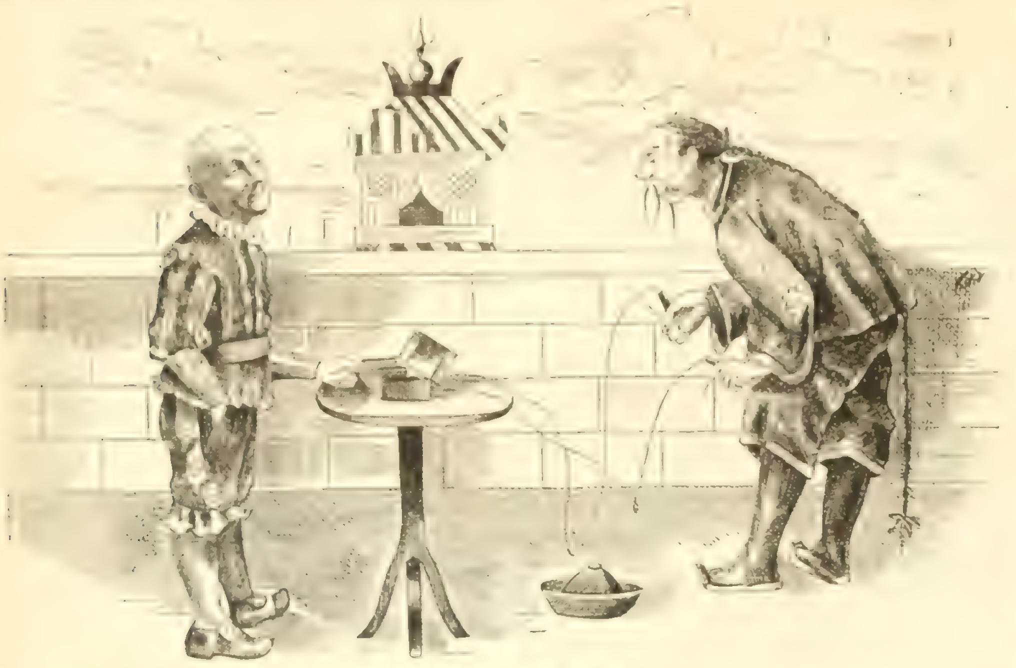
NORTH SYDNEY, C. B.—Doubtless some of your readers would like to know who the boys are in this out of the way place. First on the list come the old New Foundland timers, Thompson and Scanlan, better known to the fraternity as "Wr" and "Bs." Our whitewashed Yankee, Frank LeMoine, is one of the best hearted boys in the country. Robie McLearn, aged eighteen, stands six feet three inches in his stocking feet, weighs 194 pounds, and does not board at the W. U. Hotel. Following these are Jim Edgar, Charlie and Lew Hoyt, Charlie Coleman (latter two very immediate), Jim Burgess, Tom McDonald (the boss penman), Early Kay, late of Montreal Company, Sackville, N. B., L. W. Wilson, and W. C. Upham. The above are considered first-class operators, all under the supervision of Manager W. F. Snyder, ably assisted by W. E. Earle, day chief, and J. C. Upham, the genial night manager. We are envious of our New York brethren, and are agitating a ball to be given after the Lenten season is over. NINEY WEEDEN.

SAN FRANCISCO NOTES AND PERSONALS.—Miss Jessie B. Benjamin, one of the most expert lady operators in the W. U. main office, resigned February 1st, and entered upon a new sphere as wife of Dr. Hayes, of Boston, who came, saw, and conquered while on a visit to this coast about a year ago. All unite in wishing her much happiness. Miss Belle Eddy, of the W. U. branch office, Grand Hotel, was also joined in the bonds of matrimony on the 19th ult. to Mr. Conrad, a well-to-do gentleman of Sonora, Cal., the home of her [illegible]. She also carries with her the best wishes of her many friends. Mr. M. S. Bacon, of the W. U. main office, resigned March 1st, and left for the east, intending to renew his studies in one of the medical colleges. It is understood that Mr. Frank B. Rae, of "Electrical Diagram" fame, is to arrive in a few days and take a position in our main office. Mr. A. Venton, one of our oldest men in the main office, has been appointed manager at Stockton, Cal., vice Thomas F. George, transferred to the San Francisco main office. We received a visit a few days ago from James McConaughy, manager W. U. at Marysville. He is looking hale and hearty. General Superintendent James Gamble has gone on a visit to Los Angeles.

MARRIAGES.

LOCKWOOD—CROPPER.—Thursday, March 1st, 1877, by the Rev. W. H. [illegible], at the Beekman Hill M. E. Church, H. Clay Lockwood to Miss Elizabeth A. Cropper.

Mr. Lockwood is well known in telegraphic circles, having been in the business since [illegible]. For the past five years he has been connected with the Auditor's office [illegible] the Western Union Telegraph Company. The happy couple started at once on a bridal tour to Boston with the best wishes of their telegraphic friends.



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G. W. RUSSELL, "Reddy."	RALPH W. POPE, Inspector G. & S., Telegraph Co.

GEO. H. BLISS, Chicago, and many others.

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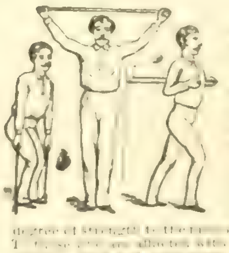

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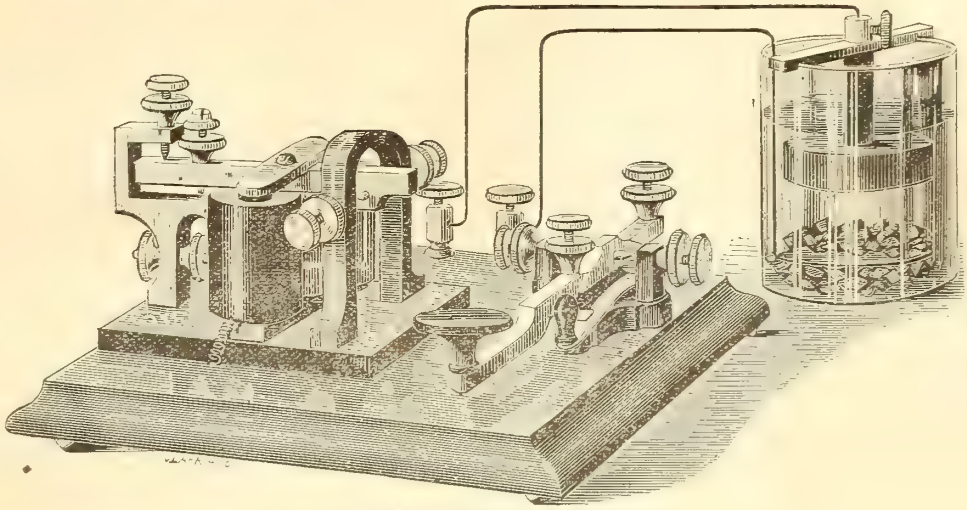

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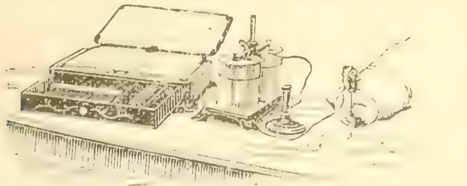

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8 Dey Street, New York,

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Electric Power Co.,

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Telegraph and Electrical Supplies.

Sounders, Keys, Relays, Switches, Registers, Dial and Printing Telegraph Instruments.

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Complete Outfits for Amateur Telegraph Lines.

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Apparatus of this class furnished separately or put up in complete working order at favorable contract rates.

Electrical Apparatus for Blasting and Lighting purposes.

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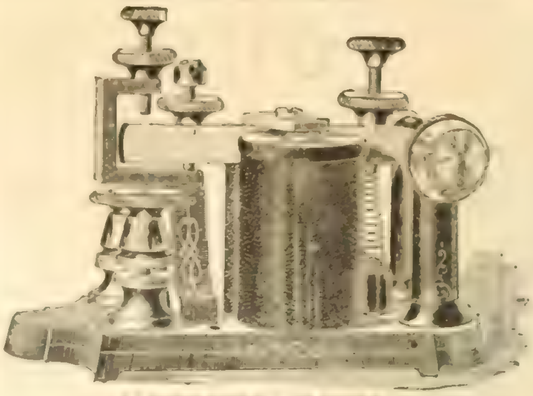

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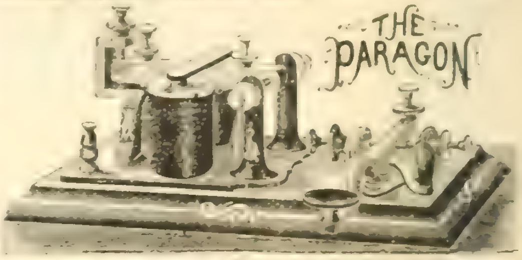
THE SPECIALTY SOUNDER

A Loud, Clear, "Free Worker," agreeable to the ear, [illegible], and especially adapted for Railroad, Commercial Offices and Short Lines.



THE PARAGON,

Cut One-third Size, for Short Lines and Learners.

SPECIALTY SOUNDER, $4.00
SPECIALTY KEY, 2.00
PARAGON, $5.00

Extra Resistance for line from one to ten miles, $1.00.

5 per cent. discount from above for remittance with order.

Coil No. [illegible], Magnet, Office Wire and Chemicals, for Learners Outfit, - - - - - $1.75

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THE HOME LEARNERS' INSTRUMENT.

PATENT APPLIED FOR. ALL INFRINGEMENTS WILL BE PROSECUTED.

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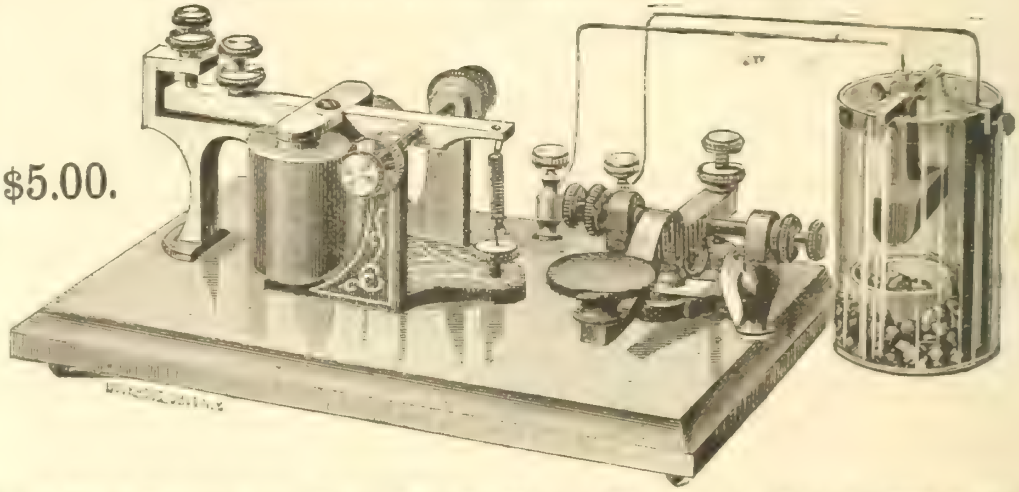

Price $6.25 for Complete First-Class Outfit, less 20 per cent., $5.00 NETT CASH,

For the above complete and Perfect Sounder and Key Combined, on mahogany base, including Battery, Chemicals, Wire, Book of Instruction, and everything necessary for a **FIRST-CLASS TELEGRAPH OUTFIT** for the Student's use, for practice **AT HOME**, or for operating **ALL SHORT LINES OF TELEGRAPH.**

DESCRIPTION.—The above cut is a correct representation of the instrument as it is furnished, ready for use.

THE SOUNDER is [illegible] ... Its mahogany base materially increases its tone and sounding qualities.

THE KEY [illegible] ... and is in all respects a perfect working Key.

THE BATTERY is [illegible] ... Western Union Gravity Battery, [illegible]

THE BOOK OF INSTRUCTION is [illegible] ... **SMITH'S MANUAL OF TELEGRAPHY**, [illegible] A. B. C. [illegible] construction and operation of Short Lines, Management of Instruments, Batteries, etc. With the outfit is also included Chemicals and Wire for setting up and operating the instruments for practice [illegible] purposes. **AGENTS WANTED**, but no further discounts will be made from the above prices except upon orders for at least Six Outfits.

RETAIL PRICES—Complete Outfit as above, $6.25 less 20 per cent. for cash with order $5.00
Instrument without Battery, $5.25 . . . . . . 4.20
" " wound with finer wire for Lines 1 to 15 miles, $6.25 less 20 per cent 5.00
Little Giant Battery, per Cell, [illegible] less 20 per cent 80
Galvanized Telegraph Wire, [illegible] less 20 per cent 1.00

HOME LEARNERS' INSTRUMENT without Battery, sent by Mail throughout United States, post-paid, $4.75. Same Instruments wound with Finer Wire, for Lines 1 to 15 miles, by mail, post-paid, $5.50.

REMIT by Postal Money Order, or Draft, or Registered Letter.

L. G. TILLOTSON & CO.,

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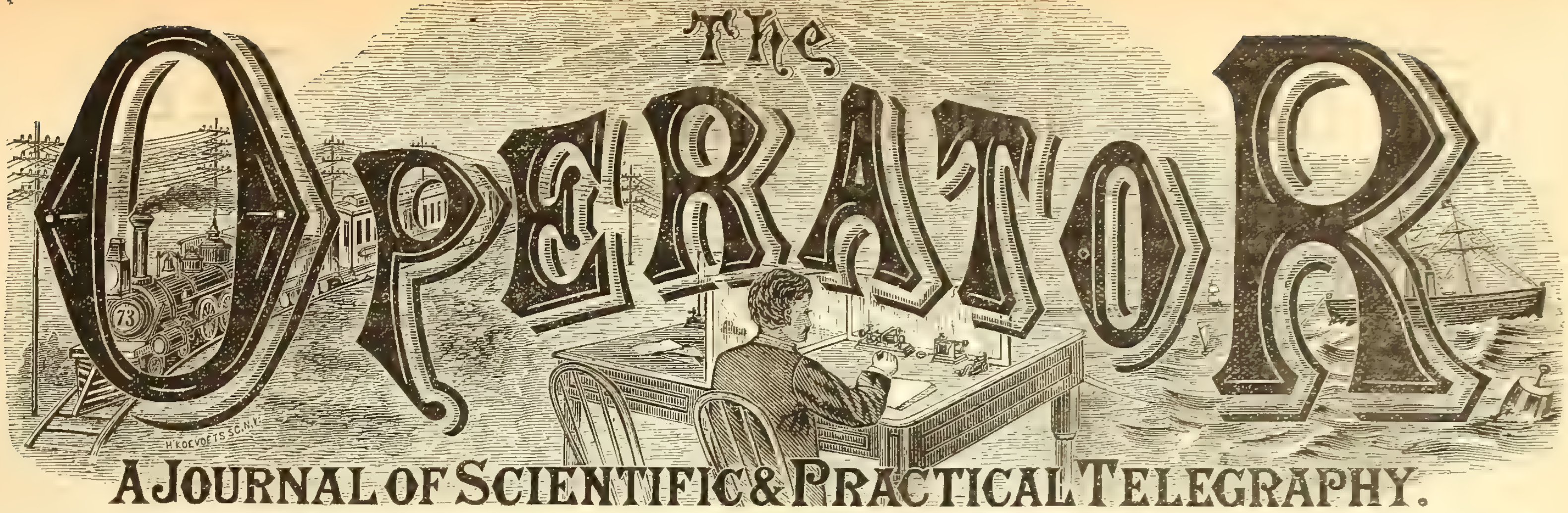
Western Depot, H. D. ROGERS & CO., 22 West 4th St Cincinnati.



THE OPERATOR

A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

VOL. VII. NEW YORK, APRIL 1, 1877. No. 3

THE OPERATOR.

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" Three Months	35

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We will send by return mail, to any address, 50 of the handsomest Visiting Cards in the market—Assorted Tints, Blue, Pink, Granite, White—with your name beautifully printed, on receipt of Twenty-five Cents. Address,

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Also, the Best Learners' Outfit ever made, now offered at a Great Reduction.

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TELEGRAPH AND ELECTRICAL INSTRUMENTS AND SUPPLIES.

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CHEAP STUDENTS' AND DIAL INSTRUMENTS A SPECIALTY.

Our prices can not be beat, quality considered.

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PRESCOTT'S Great Work on Electricity and the Electric Telegraph.

The most recent and comprehensive treatise upon Electricity that has been published.

It contains more valuable matter than any other work on this subject ever offered to the public.

No one interested in the progress and practical application of Electrical science can afford to be without it.

Sent by mail, postage paid, to any part of the United States on receipt of **FIVE DOLLARS.**

Western Electric Man'f'g Co.

A BEAUTIFUL ENGRAVING
OF
Prof. S. F. B. MORSE,
FATHER OF THE TELEGRAPH.

Numerous inquiries for a really fine picture of Prof. S. F. B. MORSE have induced us to go to the expense of procuring one of the finest engravings of this gentleman, so dear to the heart of every Telegrapher, that has probably ever been executed. It is from a photograph by SARONY, and engraved in what is called stippled work—the highest style of the art. It shows the numerous crosses, medals, and badges of honor with which the Professor was decorated, and is a picture that his sons of the Telegraph will be proud of.

Impressed on heavy cream-tinted card-board, with a neat tint back-ground. Size, 10 inches by 9, suitable for framing.

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OFFICE WIRE—Plain, Braided, Prepared, etc.
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Fine Resistance Wire.
Flexible Electric Cordage—Single or Double.
Underground and Aeriel Cables of all kinds.

I claim to furnish the best Braided Wire in the market, and I believe it is acknowledged as such by all large Telegraph Companies and Telegraph Supply Dealers.

These Wires are furnished in any desirable color or plaids.

My Rubber-Covered Wire will not crack, and is not affected by ordinary extremes of heat or cold. The rubber covering is of uniform thickness, and the wire will be found in the exact center—a result not heretofore produced.

All Wire used by me is made to my special order, and is warranted to be of the purest copper, and highest conductivity

These Wires can be had at my prices of—

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Telegraph Machinery
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Hotel Annunciators,
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The Watson Battery has every quality necessary to make it the favorite wherever it may be used in Telegraph Offices, on Private Lines, in Laboratories, or wherever constant, strong and reliable Batteries are required.

Send for Circulars, prices, etc.

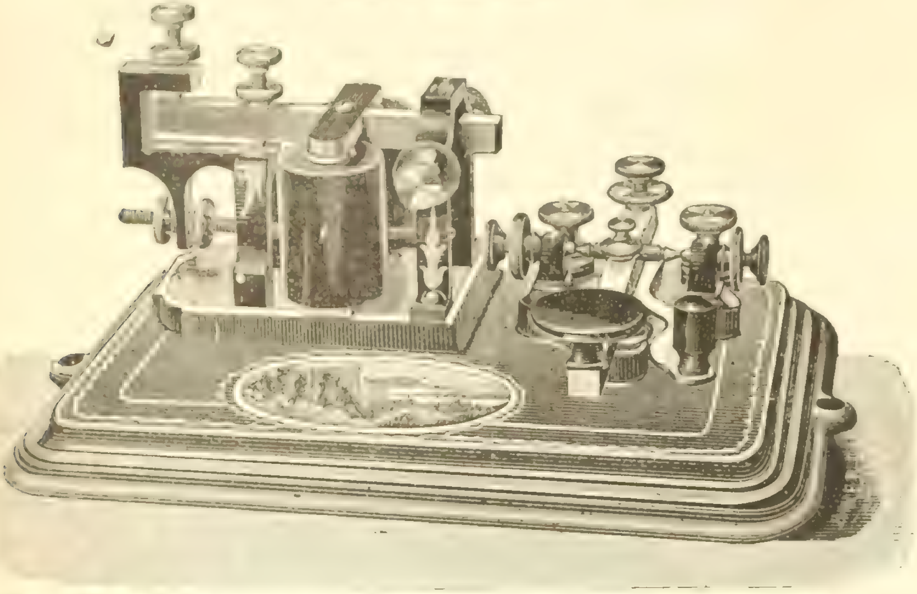
L. G. TILLOTSON & CO.,
8 DEY STREET, NEW YORK
Sole Agents in the United States.

WESTERN ELECTRIC MANUFACTURING CO.

Celebrated Private Line Outfit.

THE COMPLETE OUTFIT INCLUDES

One Private Line Instrument, One Cell Bliss' Reservoir Battery, the necessary Chemicals, Wire for Connections, and a Manual.



Our Private Line Instrument, as now manufactured, is a perfect beauty, and is fit for a parlor ornament. It will work on a line from a few feet to ten miles in length. In ordering, give the length of the line, so that the resistance of the Magnets may be rightly proportioned.

The Bliss Reservoir Battery is not excelled for force, constancy, and economy.

Private Line Outfit Complete	$10.00
" " Instrument	8.00
Bliss' Reservoir Battery, per cell	2.00

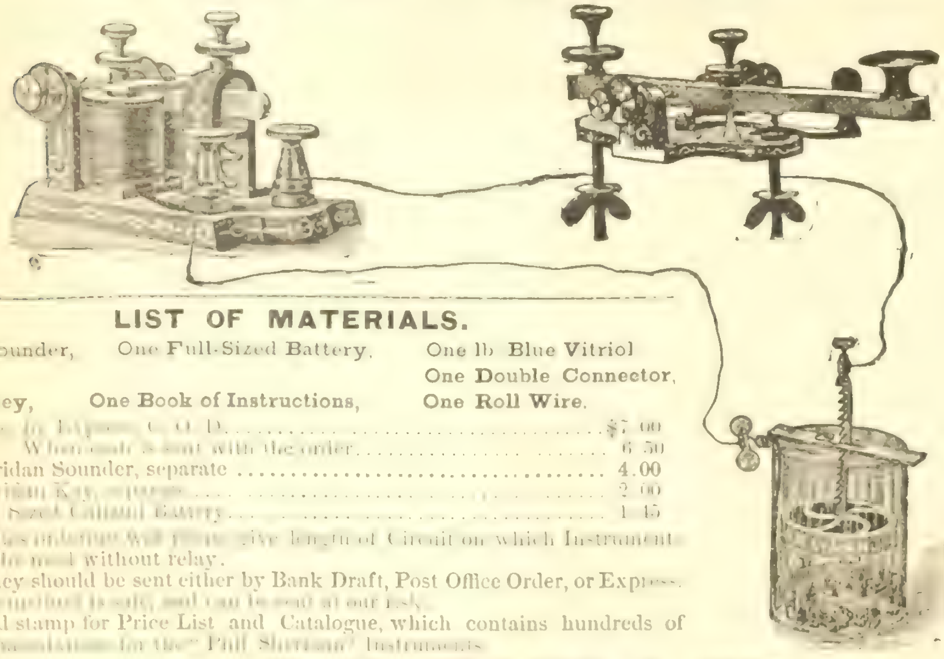
20 per cent. Discount is allowed when Cash accompanies the Order.

WESTERN ELECTRIC MANUFACTURING CO.,
20 Kinzie St., Chicago, Ill.
628 Chestnut Street, Philadelphia, Pa.

$6.50 A GREAT REDUCTION IN PRICES! $6.50

The Unequaled "Phil Sheridan" Telegraph Instrument.

A COMPLETE OUTFIT FOR OFFICE OR LEARNERS.



LIST OF MATERIALS.

One Sounder, One Full-Sized Battery, One lb Blue Vitriol

One Double Connector,

One Key, One Book of Instructions, One Roll Wire.

Price by Express, C. O. D.	$7.00
" When cash is sent with the order	6.50
Sheridan Sounder, separate	4.00
Sheridan Key, separate	2.00
Full Sized Callaud Battery	1.45

Parties ordering will please give length of Circuit on which Instruments are to be used without relay.

Money should be sent either by Bank Draft, Post Office Order, or Express. Either method is safe, and can be sent at our risk.

Send stamp for Price List and Catalogue, which contains hundreds of recommendations for the "Phil Sheridan" Instruments.

F. G. MACK & CO.,
Successors to A. B. LYMAN & CO.,
55½ Frankfort St., Cleveland, O.

A. G. DAY,

MANUFACTURER OF

Kerite Insulated Telegraph Wire and Cables.

MANUFACTORY, *Seymour, Conn.*

OFFICE, *120 Broadway, New York.*

The Dielectrical properties of Kerite have been tested in every conceivable manner during the last few years, and its superiority over all other kinds of insulation fully demonstrated.

Its durability has been proved by constant exposure to the sun and atmospheric changes of the thousands of miles of covered wire in use by the Fire Alarm and Telegraph Companies in many of the principal cities of the country. It has been largely used in the City of New York under all conditions and exposures for the last nine years, and at the present time its resistance is as great as when at first exposed.

The facts are now fully established that Kerite is not injuriously affected by the extremes of heat and cold experienced in any climate, nor by length of exposure in the atmosphere.

It will endure long continued heat below 200° Fahrenheit, while for short intervals it may be subjected to 250° or 300°; and it may be safely immersed in boiling water.

The action of water, salt or fresh, not only protects all its qualities, but very much improves its insulation.

It is also unchanged by being placed in the ground.

Any corrosive elements in the earth do not act upon it, nor is it injured by the roots of plants, which soon destroy gutta-percha.

Acids act very slowly upon it, and then only to the extent of oxydizing the surface.

It will bear exposure to hot, strong solutions of alkalies without injury.

Mineral oils and illuminating gas, so far as known, do not produce any serious effect upon it.

Exposure in a city gas pipe has not injured it.

Thorough experiments have shown that it does not suffer injury by the most destructive insects of land or water.

Samples of the core or insulated conductor of Kerite cables have for a long period been laid in the Caribbean Sea, yet the "teredo," which would have speedily destroyed other cables thus exposed, has left these entirely unharmed. And experimental lines on the Isthmus have been equally exempt from the ravages of the white ant, which destroys wood telegraph poles so rapidly that iron poles have been substituted.

The same qualities which render it so indestructible by all corrosive agents, insure its durability for an indefinite period in all climates.

Neither gutta-percha nor vulcanized India-rubber will bear storage in tropical climates without rapid deterioration, and undergoing chemical changes, which destroy their essential qualities, while under the same conditions the Kerite insulation is not changed in any respect.

The Kerite covered wire is used almost exclusively by the United States Navy Department in the torpedo experiments which have been going on during the past three years. Prof. Farmer, the Government Instructor, says of it: "It fulfils the conditions required in the torpedo service better than any insulator with which I am acquainted."

John L. Lay, Esq., the inventor of the famous torpedo bearing his name, says that he thoroughly tested the Kerite cable in this country and also in Egypt, and finds it preferable to rubber or gutta-percha, heat not affecting it, and so far as his experience goes, it is proof against the "teredo."

Messrs. Gamewell & Co., proprietors of the American Fire Alarm and Police Telegraph, have used the Kerite wire for ten years. They say: "We have placed it in use in some sixty cities, extending from Halifax, Nova Scotia, on the north, to New Orleans and San Francisco on the south and west, embracing every variety of climate, and it has proved itself to be, under all circumstances, the most reliable and indestructible insulator known to us for telegraphic purposes."

The experience of other parties using the Kerite coated wire overhead, underground, and under water, is almost precisely similar, and is well summarized in the following opinion of George B. Prescott, Esq., the Electrician of the Western Union Telegraph Company. Mr. Prescott says: "In September, 1869, we placed some of your Kerite wire, unprotected by any covering whatever, in the tunnel under the river in Chicago, and have since continued its use in that exposed situation with the most gratifying results. A portion of the tunnel is very wet, and water, saturated with lime, constantly drips upon the wires, while in other portions they are kept alternately wet and dry, which is well known to be one of the severest tests that any insulating material of an organic nature can be subjected to; and yet, after five years' exposure, under the above conditions, the Kerite covering shows no signs of decay or deterioration. An insulating covering of India-rubber or gutta-percha under a like exposure, would have been destroyed in much less time."

For further particulars, address,

A. G. DAY,
120 Broadway, New York.

THE OPERATOR, A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY

April 1st, 1877.

Volume VII. **Whole No. 75.**

The Telephone.

Och, Biddy, ashtore! d'ye know what they tell
Of a foin grand invinshun of one Misthur Bell?
They say it can shpake, it can cry, and can sing,
Though its only a wiare like a long pace of string;
You jist titch your tongue to a wire all curled,
An' it shpakes all at once all over the worruld!
If you were in Ireland, and jist gave a laff,
I'd hear it right here by this new tilegraph.

An' they say it's all thrue, an' before a long time
We'll hear cannons firin, an' Parish bells chime.
An' thin wid the gintry they'll be grand affairs,
For they'll hear Queen Victoree repaytin' her prayers;
An' whin its complayted they'll be a new era,
For them that are far thin will spake to us nearer;
An' the Queen will spake plisant to Prisident Hayes,
Who'll spake back, like Grant, "Let's have pace if you plase."

An' more they cud do wid this wiare, galore,
They cud sink it down deeper and hear Satin roar!
But of Satin they wants to be quite indepindent,
For science must iver be in the ascindant;
An' so they'll ascind in a foin big balloon,
An' jist give the ind to the man in the moon,
Who'll spake of the weather more thruely, ochone,
Nor Vennor or Probs, wid this grand telephone.

JAMES WALTON JACKSON.

◆◆◆

The Philadelphia W. U. New Building.

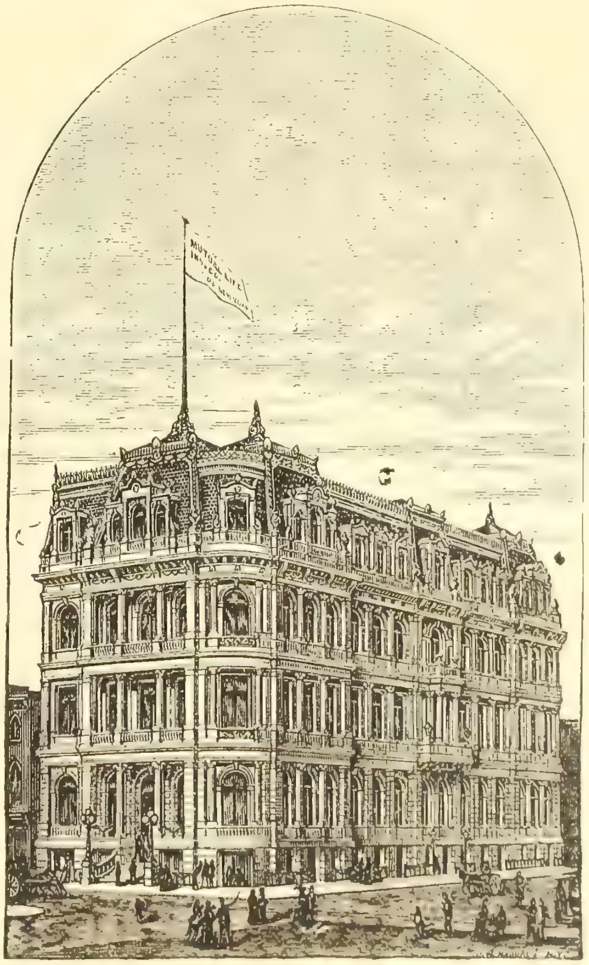
A MAGNIFICENT OFFICE.

BY WERNER.

At last the fond hopes and dearest wishes of the Philadelphia telegraphers are about to be realized, the City Councils having just passed the ordinance granting the Western Union Telegraph Company authority to exercise a right which by charters in its possession belong to it, namely, to move its main office from Third and Chestnut to Tenth and Chestnut Street, and to use the poles which it had already erected to form new telegraphic connections.

About the first of July, 1875, the company named, recognizing the rapid westward march of improvement, wisely determined to remove its chief office nearly a mile to the west, within one square of the new post-office, and a mile closer to the new public buildings now in course of erection. Its president accordingly executed a master stroke of policy by leasing a large portion of the magnificent granite building of the Mutual Life Insurance Company on the northwest corner of Tenth and Chestnut streets. Enormous posters appeared on the building, setting forth that "This floor will be occupied by the Western Union Telegraph Company on or about January first," meaning, of course, January first, 1876, an announcement which waked up all the cross grained old fogies and more deeply interested parties in the city. Factious and weak kneed opposition at once arose, but was entirely impotent, until a number of very costly poles, some of them seventy-five feet in height, with a carrying capacity of ninety wires, were erected on Third, Race, Tenth, and Sansom streets. Men were then ferreted out to swear, and swore like troopers, that the poles were a nuisance, while a large number swore just as roundly on the other side that they were not. Peddlers of old telegraph cable swore that all telegraph lines ought to run under ground, in cables just like what they had for sale, cheap; men with old ship's masts to sell thought wires ought always to be carried on poles; hysterical old women avowed that gigantic poles made them nervous, while level headed men could see nothing but injustice in singling out one company as a victim; and while the perplexing squabble was in full blast the court granted a temporary injunction against the use of the poles, and subsequently, through pressure of the then city solicitor, made the injunction permanent.

The company then, not to be disheartened, finding itself debarred from exercising its vested rights, petitioned the City Councils for permission to use the said poles. The ship chandler and the underground cable man, the hysterical old woman and the level-headed man were all on hand again, and testified before a profoundly learned committee as to the different merits of their systems or dislikes; an array of talent which so impressed those experts that a kind of domestic *status quo* was erected and maintained for about a year. In December last somebody dusted the petition, and its merits having all along been clear to most folks, it was reported favorably, and passed the Select branch of Councils. Unfortunately it was near the close of the session, and when some blooming legislator, who may yet be President of the United States, tacked an amendment to it, expatiating upon the architectural style of the modern telegraph pole, it was found that there was no time for Select Council to concur in the intellectual feat of the member of the lower branch, and the bill died with the outgoing legislative body.



THE NEW WESTERN UNION OFFICE AT PHILADELPHIA.

The new year opened with all the terrors of the law forbidding the W. U. to use as much as one inch of the unoccupied space between the center of the earth and the sky; but with a new body of legislators, and several of the late combination civil and military officers politically dead, the bill was again taken up, promptly acted upon, and has just reached a favorable ending, after a a delay of nearly two years.

The new building is probably one of the handsomest on the continent, built of gray granite and iron, and proving its value a few weeks ago by acting as a barrier to the great fire which destroyed Fox's Theatre, damaged the Mercantile Library, and completely obliterated half a dozen other places surrounding it. It is three stories in height and surmounted by an immense mansard roof, and with a "New York basement" and sub cellar forms a spacious edifice.

The upper floor, or mansard roof, one large room on the third floor, and the basement and sub cellar have been leased by the Western Union Company and fitted up most elaborately, no expense being spared in rendering everything as perfect and convenient to the employés as possible. In the subcellar are the batteries, composed of about 2,800 cells of Callaud, which have been systematically arranged for the greatest convenience and efficiency. The steam engine for furnishing power to the network of pneumatic tubes is also stationed in the cellar.

The Receiving Department, presided over by Mr. William Carley, cashier, one of the most efficient and respected of the officers, is situated in the basement, and fitted up in a style which is rarely seen outside of the Capitol at Washington. Mr. Carley is ably assisted by Messrs. Charles Jamieson, assistant cashier, William F. Prosser, George S. Downs, and Charles Holst. The Money Transfer Department, a most important although new branch of our business, is also located on this floor, under the immediate supervision of Mr. S. S. Garwood, an old and favorably known operator, manager, and superintendent. The Delivery Department is also on the same floor, and under the charge of the genial George Maull.

On the third floor is the office of the superintendent. Mr. Merrihew is assisted in his arduous duties by Mr. William B. Gill, chief clerk, Messrs. Cornag, McLaughlin, and Smith assistants. Mr. Gill has risen from office boy to his present very responsible position, and is very popular.

On the fourth floor, reached by two elevators and easy flights of marble steps, is situated the operating room, coat room, and clerk's room. The operating room is a chamber seventy-five by sixty feet, with a ceiling fifteen feet in height beautifully frescoed in light blue and gold. The original floor—marble tiles—has been over-laid with a flooring composed of alternate strips of walnut and ash two inches in width. There are fancy wood tables for 106 instruments, arranged in compartments of four, six, and eight, with French plate glass partitions. All the instruments are brand new. There are two quadruplexes, three duplexes, six repeaters, two motor printers, the remainder being of the Morse pattern. The switch-board, which is located in the western part of the room, is in four sections, and will accommodate about 150 wires. It is of the latest Western Union pattern, commonly known as the "spring-jack," and is nickel-plated and handsomely encased in highly polished walnut and cherry wood. This room is connected by pneumatic tubes with every department of the company in the building. Three marble wash stands are also provided, so that the intellectual department will have no further excuse for begrimed faces or unkempt hair. Adjoining this room is a spacious coat-room, and to provide against the "first man off" appropriating the best hat, as has often been done, forty-five separate wardrobes are provided, and each man is to have a key to one of them, that he may lock up whatever superfluous clothing he may chance to possess. Back of the coat room is a very large and handsome chamber, which has not yet been appropriated to any particular use. Who will donate a scientific library to be placed in it?

Fronting on Tenth Street and Marble Alley is the clerks' and book keeping departments, occupied by the gallant Colonel Greene and his assistants.

There is a high-toned janitor, a wonderful transformation from our familiar "Old Owen," to whom we are bidding a tearful good by. He is dressed in a splendid blue uniform with [illegible] rows of glistening brass buttons, and gold lace, looking like a captain of police, smokes fifteen cent cigars, surveys you with a tyrannical expression, and when you bid him good morning says "Haw," just like a bloated aristocrat. There is another in the elevator, grandly caparisoned, and to whom New York's elevator man, "Peter," is only a hollow mockery of official pomp.

Taking all in all the Philadelphia operators have reason to be proud of the spirit of their officers and of their new quarters, as everything that shrewd foresight and money could command has been done to make an exceedingly comfortable and cheerful office. True, we feel a little abashed by the elegance, but in time we will become accustomed to that. At present the visitor from that garret at Third and Chestnut finds it difficult to persuade himself that he is not in some celestial palace; you expect every minute to see some man come past you with a javelin, wearing scarlet hose and a slashed doublet, and you are not quite sure whether or not you should know him, if he should come, with: "What, ho!" [illegible]

From the street the building is the center of attraction for many squares around. Prominent are the stone carvings, clear cut and in bold relief near the base, blending into fantastical shapes higher up, and melting into each other at the top, where the eye sees nothing but its whiteness. And the diminutive [illegible] of a common operator creeps inside to peep about and marvel at the costly marble, the sparkling chandeliers, and the elegantly polished plate glass—all combining in gorgeous but harmonious colors. The stairway is a marvel of art. The stairs are of pure white marble, divided into sections of ten steps each, with a "landing" after each section. The wainscoting, to the height of four feet, is of black marble, at which height it blends cunningly into a strip of red marble, and terminates in what may be called a "banister" of black marble, all of which is wrought to the highest degree of polish. This staircase forms a kind of a rotunda, and is surmounted by a frescoed ceiling of great beauty. And here the day force can sentimentalize as they come on duty the customary ten minutes late. Strange specters and sober thoughts haunt the mind of any subordinate ascending any kind of stairs when he is ten minutes late; but here, bathed in mellow light, all the surroundings will thrust forth the weak delusion that the telegrapher's Millennium has come, and that henceforth we are to lead a butterfly life of ease and indolence overwhelmed with the treasures of science, poetry, art, and big pay. Bronze and alabaster are on every hand, and fairy forms send the poor plug into delirious contemplation. In the intricacies of cunning designs he may trace in one place the outlines of the laureled Cæsar, in another the burly form of Marc Antony, and again, elsewhere, the boy-like figure of the youthful Alexander the Great; while the glistening marble, mirror-like, reflects the rich and delicate touches of the painter's brush. Roses and lilies swim upon a misty sea of azure blue, and in a masterpiece of the painter's art a miniature firmament of golden stars float above, seeming like a canopy "which Love has spread to curtain her sleeping world." So will the delusion be strengthened when, henceforth, the scenes of his pleasant labors are illumined by silvery lights reflected from alabaster vases, and scented by the enchanting "odors of orange and sweet verbena."

Following is a complete list of the operating force moving into the new building, drilled to the highest degree of perfection by their courteous manager and his talented assistants:

Henry C. Robinson, manager; George W. Porter, chief operator, assisted by Messrs. Davis and Merriless; Messrs. George Snyder and Jacob R. Woodruff, printing operators; John A. Hartman, Charles Moore, Joseph Bradley, Thomas J. Clinger, Joseph I. Wilks, Julian S. Estes, James L. Mingle, William H. Pusey, James Swan, Wm. T. Brockwell, Mark D. Brockwell, Harry Schultz, James R. Rae, Charles G. Payne, Wm. F. Jones, Jacob F. Shive, Herman W. Schroeder, Joseph W. Godfrey, John J. Loughrey, Charles W. Hall, J. T. Anderson, Thomas J. Foley, and David F. Crean—all of the day force. Of the night force who will grace the new quarters there are: Mr. Julian Soule, night manager, in the temporary absence of Mr John T. Zeubun, assisted by Mr. L. D. Mason, the worthy dean of the night force; Messrs. William D. Black, William H. Dillon, John D. Clarke, E. Louis Maize, Frank W Griffin, and Jesse R Mills.

◆

The Telephone.

One of the things in human nature, the cause of which is past finding out, is that shadow which always precedes coming events. Another is the impulse, instinct, or fellow feeling that seems, unperceived by each other, to pervade all concerned alike. I shall not undertake to clear up the mystery; on the contrary, I desire to add another link to the already lengthened chain.

The "lightning workers" of this city are noted for their jollity, wit, and nerve to stand up under any misfortune. The most exasperating failures of [illegible] the entire collapse of the [illegible] them not enough to cause a "break" in the "current" of their happiness. What is more trying to a first-class operator than to lose his Postal, or to realize that his million dollars in stock certificates have suddenly depreciated to less than the value of the paper upon which they are printed? Echo answers, "What!" Men who can smile, and smile, and be cheerful and serene under adversities like these, one would think, could never be discomfited by anything, not even the shadow of death or the ghost of a plug. Alas, whole man is very uncertain.

The Operator of March 1st arrived and was greedily perused, as it is worthy to be, but, sad to relate, it affected every one most strangely and gloomily. The W. U. office, which has the largest force on duty at once, fairly groaned with the blues. The boys all looked as if each had received a message from his friends down below, saying:

> "We'll meet you at the furnace gate;
> Don't hurry—you can't be too late."

Miss Koates and Miss Pelican trembled like the needle of a compass, and their countenances assumed the whiteness of the blanks before them. Each operator looked at his neighbor in dire amazement; none being able to speak, but each seemed swelling and choking with some inward commotion—a kind of waking nightmare. Some left their keys open, some stopped with messages half sent, others paused in messages they just commenced to receive. Finally, as if by inspiration, all eyes turned to the veteran manager, John Hallen. He returned their gaze with a fatherly and sympathetic glance. He seemed to feel conscious that the safety of his faithful help depended upon his immediate action, so, making a mighty effort, he gasped, "Telephone!"

"Telephone!" reiterated every other throat in the office. "Down with the telephone!"

Mike, the battery man, coming in at this moment, and observing the terrified looks of all, stripped up his sleeves, and shouted, "Down wid de elephant, away wid him, show him to me!" and he bounced about the room after the most approved Indian war-dance fashion.

The most tranquil persons under ordinary circumstances are often the most excitable on extraordinary occasions. Telegraphers are not an exception to this rule. Had their sudden passion for eradicating the telephone, root and branch, been allowed to run its course, the Western Union office in this city would have been a total wreck, "a thing of beauty" only in the past, and its destroyers might now have been lying about bleeding and crippled, victims of their own folly. But thanks to the coolness of Manager Hallen, he calmed the troubled spirits by saying, pleasantly, but firmly, "Now to your work. We will meet at my residence to-night at eight o'clock, sharp, to consider this new innovation."

This extraordinary scene in the Western Union office and its attendant developments has convinced me that the telephone is as near nature's instrument as art can be brought. There is no connecting wire between the Western Union and the Atlantic and Pacific offices, nevertheless the outbreak of feeling in one office was almost instantly followed by a somewhat similar commotion in the other. To make it more unaccountable, the Atlantic and Pacific operators had not yet received their papers from the post-office. The dryness and pureness of this atmosphere must have rendered a wire unnecessary, and the practiced ears of the operators acted as telephones to receive its undulations and flash its messages to their brains.

In my reportorial capacity I rushed out of the W. U. office as soon as order was restored there, and hastened to the A. & P. office, a block away. When I entered, Sam Lee was striking right and left among the instruments on his table, and kicking desperately at an imaginary something under it, exclaiming frantically, "Bring on your telephones! I'd pound 'The Last Rose of Summer' out of them 'Ninety and Nine' times quicker than a flea can jump."

Anxious to learn if the epidemic had spread to the railroad offices, I betook myself to the C. P. Depot where I arrived just in time to save my little friend, Charlie Sheerher, a good pummelling. A rough mountaineer of huge proportions had him backed up against the outside of the building, and was shaking a message in his face, and exclaiming wildly, "How dare you send my name that way! Who in thunder told you my name was Telephonia? Do I look like a woman, hey? You son of a kangeroo, I have half a mind to wipe you out."

I engaged the stranger's attention, and Charlie silently stole away. As soon as the stranger cooled off a little, I asked him the trouble.

"Trouble enough," he answered. "My brother was to arrive on this train from the east with his bride. I went into the office here and wrote a telegram that I would meet him at the depot, signing William. The telegram was handed to him on the train. He opened it in presence of his wife, when, lo and behold, it was signed Telephonia. My brother's wife had her suspicion that something was wrong. He could not explain. You can bet your bottom dollar there was a scene on that train. My brother's wife got off at the first station after the receipt of this villianous dispatch, telling him to 'go to your Telephonia, you deceitful wretch.'"

Then walking to and fro on the platform, the wild mountaineer said: "Oh, but I will make them pay for it! I will teach them how to play their tricks on me! I will sue them for a hundred thousand millions, and never take a cent less!"

Going over to the S. V. R. R. Depot to complete the round of offices, I met on the platform that faithful operator, Jimmy Gilpin. But, oh! what a change since morning! He looked indeed like the "Last Rose of Summer"—one that had been wilted by a thousand suns. "Good Heavens, Jimmy, what is the matter?" I anxiously inquired.

He held down his head and answered: "I am ruined, Jack, ruined. I have lost my situation."

"It can't be possible, Jimmy; how did it happen?" I hurriedly asked.

"Well," he said, dolefully, "the stage was going to be half an hour late arriving at Latrobe, and we wanted to hold our No. 2 for the connection. The dispatcher wrote the order to the conductor to hold his train until the stage arrived, and gave it to me to send. It appears that in some unaccountable manner I substituted telephone for stage, and the conductor, thinking that it was the name of a new engine, held his train until it was two hours behind schedule time before he asked for an explanation. The train has just arrived, too late for the San Francisco connection. Such another lot of mad passengers were never on top the ground before."

The poor boy was truly miserable. I tried to comfort him, but it was like feasting a starving man on hymns and prayers. He wanted something substantial—the return of his situation and reputation.

Such a combination of unfortuitous events began to depress my spirits, and I could not but think that if the telephone affected every operator in the land in this manner, it was, indeed, a "Destroying Angel," and should be discountenanced by all mankind. But self-preservation is the first law of nature. I doubted not but that the boys would be equal to the emergency, and devise some means at their meeting to inspire them with new hope and courage.

At eight o'clock P. M. I called at Manager Hallen's residence and found that I had brought up the rear. I had been preceded by John Heitch, John Hagan, Tony Williams, Bob Boneman, Gus Jackson, Miss Koates, Miss Pelican, Charles Hoglan, Sam Lee, Ned Norhorse, Charlie Sheerher, Jimmy Gilpin, Charlie Airchild, Will Hormsby, Presley and Snooks, messenger boys, and Mike and Barry, battery men.

Tony Williams opened the ball by bobbing up and exclaiming: "I call this meeting to order by appointing Manager Hallen chairman."

"I second the motion," said Ned Norhorse, puffing the smoke of his cigar in curls to the ceiling. "I, I, I," shouted all, some jumping to their feet and clapping their hands. Manager Hallen said that he was in favor of progress and invention, but when he saw a monster rising up before him that threatened to destroy the source of his livelihood, to deprive him of labor and its reward, and not only himself, but thousands of others, he thought it high time to act. He hoped to hear the views of all of his brother and sister telegraphers present.

Will Hormsby said that he understood the telephone was a kind of Madam Rumor instrument that heard everything and told it to everybody. What would become of the sewing circle and the quilting bee? Would we stand idly by with our hands in our pockets and see the best and most cherished weapon of our mothers, sisters, and sweet-hearts stolen from them? No, a thousand times no! And he twitched an expressive smile at Miss Pelican, which was observed by Gus Jackson at her side, and caused him at once to assume a pugilistic attitude.

Miss Koates said that the telephone would break the hearts of the ladies. She would always be afraid to say anything, to have any little confidential chit-chats (here she glanced sweetly at Bob) with her brother operators. She hoped it would never, never be allowed to come into use.

Charlie Airchild said that he did not propose to talk, but to act. He had drawn up some resolutions which he would read, and if they expressed the sentiments of those present he hoped they would be adopted. They were as follows:

"*Whereas*, A certain Professor Bell has invented an instrument called the telephone, which is intended to supercede all other telegraph instruments, and to entirely dispense with operators, to disrupt the family circle, burst the bonds of social union, and make one man's thoughts every man's thoughts, and one man's business every man's business, and

"*Whereas*, The Constitution of the United States guarantees to every man life, liberty, and the pursuit of happiness, and

"*Whereas*, The telephone is an instrument of death in so far as it deprives us of the means of life; curtails our liberty by forcing us into poor houses; takes from us the pursuit of happiness by rendering it impossible for us to take a hand at the noble game of Pedro, to smoke the fragrant Havana, or quaff the foaming beer; therefore, be it

"*Resolved*, As the sense of this meeting that it is the duty of the President of the United States to remain faithful to his avowed principles of civil service reform, and maintain us in our situation so long as we are true to them, and to permit no telephone or other agency to supplant us. And further be it

"*Resolved*, That we appeal to the fraternity throughout the world to band together as brothers in defense of our rights and the rights of humanity. And, finally, be it

"*Resolved*, That a copy of these resolutions and the deliberations of this meeting be forwarded to THE OPERATOR for publication."

The resolutions were greeted with three rousing cheers, and adopted without a dissenting voice. The assemblage shortly afterward broke up.

GOLIAH.

SACRAMENTO, March 15th. 1877.

Into the Jaws of Death.

A TELEGRAPH OPERATOR'S STORY.

BY VAN.

"Want a yarn, eh?" said my friend, Erhardt, as he tipped his chair back and deposited his number sixes upon my operating table. "Well, I am afraid you have applied at the wrong window, young man. There never was a much worse hand at telling stories. I have had in my life but one experience which was at all remarkable, and I think I have told you of that."

"Your adventure with the highwaymen in the depot here? No, you have never told me about it. I have heard the station agent speak of the affair once, but that is all. Tell me the whole story."

Erhardt was an ex-operator and the cashier of the H— bank, a solid, substantial institution, the repository of the savings of the farmers for miles around, and which, in its way, transacted more business than many of its more pretentious city prototypes.

He was waiting at the depot to meet a friend expected on the milk train, which, as usual, was a trifle over four hours late. He had expressed a proper amount of disgust on the receipt of this information, and finally took a chair in my office to wait. It was a cold, blustering night; the wind howled without, and my fire (of old railroad ties) roared and leaped in its cast-iron prison.

"If I *must* wait here for that confounded slow coach, I might as well spend the time in that way as any. I like to hear myself talk pretty well." And he settled himself in his chair and lighted a cigar.

"It was some seven or eight years ago, 1867, I think, that I was sent to open the office here. I remember a little interview I had with the superintendent just before I started. I was a little wild in those days, and had just returned from a week's fun.

"'Erhardt,' he said, 'I will give you just one more chance. I am going to send you down to H—. If you behave yourself there, and show that you have any of the true stuff in you, I will give you a better position in time. If not, I shall wash my hands of you, and you will receive no more employment from this company.'

"He looked after me somewhat regretfully, I imagined, as I went out. I think he was inclined to like me, but my conduct made it impossible for him to show me much favor.

"Well, I came down here and opened this office. Telegraphing was more of a curiosity then than it is now, and I found myself regarded as a sort of lion by the people here. I was then a first classer, and could take my forty words a minute as easily as any one. Had it not been for my frisky habits I would probably at that time have graced some large office.

I now tried hard to be steady and sober, and really succeeded very well. I struck up an acquaintance with the station agent here, who was a steady, thorough-going young fellow and an excellent companion. He was greatly taken with the mysteries of telegraphy. Very much to his delight, I offered to teach him, and had soon transformed him into a very tolerable plug. He read very well—much better than he could write. I very quickly saw that Mason had in him the material for an excellent operator. He had a keen sense of humor, and we were eternally playing jokes on each other, which were always taken in good part.

"About fifty miles further down the road was a small office in charge of a Miss Annie L—. I introduced Mason to her over the wire, and they practiced together a great deal. Mason was a little the best receiver, and somehow managed to spend very much of his time retailing to her that ineffable nonsense which is so interesting to the participants, and such idiotic bosh to outsiders.

"I looked upon all this with considerable amusement, not, perhaps, unmixed with a spice of envy. They took so much pleasure in conversing with each other that I felt called upon to interfere. But how?

"One day I fell into a brown study—determined to do *something*. The result of my cogitations was that I rummaged in my 'local' closet and produced an old antiquated Morse key which I had brought to H-- with me, thinking, perhaps, it might be of use. This I proceeded to fix up in a corner under my table, connecting it to the main line precisely as my other key was connected. My table stood against the wall, directly under a window, and it was so dark underneath that there was absolutely no danger of discovery. Then, at odd times, when Mason was not around, I practiced sending *with my foot*. I found the process of writing in that manner not half so difficult as one would suppose. I had bent the circuit closer so that I could move it easily, and the rest was merely a matter of practice. I persevered until I grew quite proficient in this novel method of transmission. My foot-writing, so to speak, sounded remarkably like Miss L—'s style!

"It was not more than a day or two after I had decided that my foot was sufficiently versed in the new art to commence business, that an opportunity presented itself. It was after supper. The last train but one had passed. There were in those days very few passengers by the milk train, and H— was not a milk station, so Mason did not wait for it. He slammed his ticket window down, shut up his safe, and then came to my desk, leaned over, saw that the wire was quiet, opened the key, and commenced calling 'Ax, Ax, Ax—M.' *Her* private call. Now was my chance!

"'I, I, Ax,' answered my pedal extremity.

"'G. E. Isn't it a beautiful evening?—M.'

"'Good eve, Yes, delightful. I am going to take a walk after I have closed up the office.—Ax,' I answered.

"'What are you doing this evening?—M.'

"I have just finished my book, and have nothing to do until I close.—Ax.'

"It must be remembered that my mishievous foot took the part of 'Ax' in this conversation.

"'Good.' (Draws up a chair.) 'Then we will have a little chat. What have you been reading today?—M.'

"'The Moonstone. Do you know, I believe I have the gift of second sight! I fancy I see you. Yes, I *can* see you! You are leaning upon a table; now you have arisen. You have on a blue suit, with a black necktie, and gold watch chain. You had a straw hat on your head, but have just taken it off.'

"At these details, which were, of course, exactly correct, Mason's face assumed a look of extreme astonishment, mouth and eyes wide open, resembling nothing so much as an exaggerated exclamation point.

"'Now you have taken out your handkerchief and wiped your forehead. Your personal appearance would be much improved by closing your mouth.'

"Mason shut it with a snap, then tried to say something and failed.

"'Yes, that is better. If you only would not stare so—'

"Mason siezed his hat and dashed out of the office as if the evil one were after him, not even bidding me good night.

"I laid back in my chair and laughed until I was weak. My attention was attracted to the sounder by hearing 'R' (the largest city on the line, thirty miles above H—), calling furiously. I answered and was rewarded by—

"'I wish to Heaven you would stop that nonsense and attend to business. Ahr, 21.—R.'

"'TO J. R. C—, PRES. H— BANK:

"'The bullion has arrived. Do you wish it sent by milk train to-night? I shall not send it unless I receive direct orders at once. WM. K—,
'25 paid, 95. Cashier R— Bank.'

"I copied the message, inclosed it in an envelope, directed it, and called the freight-house porter who was in the outer room.

"'Be sure and get an answer, William,' I said.

"'Faith, I will,' he replied.

"I followed him to the door. The moon had gone down, and it had grown very dark. The station was about half a mile from the village, and I could just see the lights of the nearest house nearly that distance away. It was not built up then as it is now. The situation was certainly a very lonesome one, but I did not feel at all afraid though now alone in the station.

"In about half an hour William returned. 'Rather a lonely walk, William,' I said.

"'Yis, sur,' he answered. 'I came back across the fields and so shortened it.'

"Which, in all human probability, saved his life!

"I tore the envelope containing the answer open and read it.

"'You can go home now, William,' I said. The message read:

"'TO WM. K—, CASHIER R— BANK:

"'No; do not send the bullion to-night. I will give you further orders to-morrow as to its disposition. J. R. C—, Pres.'

"I had checked the message, and, standing by the table, had stretched out my hand to the key to call 'R,' when an arm was roughly thrown around me, pinning my hands to my sides, and I felt the pressure of cold steel on my temple.

"'Move, shout, or speak but a single word and I will blow your brains out,' said a harsh, determined voice in a low tone.

"I am as brave, perhaps, as most men, yet I confess I was thoroughly frightened—scared almost to death.

"I could hear the muffled tramp of men in the room. One of them blew out my kerozene lamp, and turned a dark lantern so that it shone in my eyes and almost blinded me. Another man, low in statue, but short and thick set, with a long beard, and a mask over the upper part of his face, placed himself directly in front of me and produced a pair of handcuffs which he secured upon my wrists. My arms were then released by the man who had held them. He, with the beard, who seemed to be the leader of the gang, then, by the light of the lantern, hunted over the table until he found the message, which he read and carefully placed in his breast pocket.

"'You are sure this message has not been sent?' he said, addressing another of the gang.

"'I know it has not,' was the answer. 'He was just getting ready to send it when we entered.'

"'Very good. Now,' he said, turning to me, 'I want you to understand that we are going to secure the treasure which was to have been sent down from R— to-night, and you will help us. If you have any objections this little persuader will silence them.' As he spoke he tapped the butt of a revolver which projected from his pocket.

"He took up a pencil and proceeded to write a message on a soft sheet. While he was thus employed I took occasion to glance around. There were eight men in the room, all of whom wore masks similar to that worn by their leader. I could just make out their forms in the dim light. A hand dropped upon my shoulder showed me that even the turning of my head had been observed.

"'There,' the leader said, 'you will send that instead of the other message.'

"He held the sheet up before me. It read:

"'TO WM. K—, CASHIER R— BANK:

"'Yes, send the bullion by the milk train to-night without fail. My cashier with a guard will be at the station to receive it. J. R. C—, Pres.'

"I looked down at my manacled wrists. The irons were heavy, and the chain connecting the two rings not more than three inches long.

"'I can't send it with these on,' I ventured.

"'You must!' said the chief grimly.

TO BE CONCLUDED IN OUR NEXT.

THE OPERATOR.
A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

April 1st, 1877.

WHEN requesting a change of address, subscribers will please give their former as well as their present address.

AMONG other places THE OPERATOR is regularly on sale in this city at the corner of Broadway and Liberty Street, at the corner of Broadway and Fulton, in front of the Western Union Building.

WE lack a couple of numbers of THE OPERATOR for March 1st, 1876, April 1st, 1876, and November 15th, 1876, to complete files. Will somebody please mail us a copy of either of these, for which we will extend their subscription one month.

THE demand for back numbers of THE OPERATOR has been so great as to entirely exhaust our reserve supply. We are therefore unable to furnish any back numbers of this present year except the issues of January 15th, February 15th, and March 15th.

THOSE desiring Learner's Outfits will find a very large assortment advertised in to-day's OPERATOR. Messrs. F. G. Mack & Co. have reduced the price of their well and favorably known "Phil Sheridan" to $6.50 for the complete outfit. See advertisement on page two. Messrs. Lamnett & Decker are now selling their beautiful "Paragon" at $1.80 complete. Their advertisement will be found on page fifteen.

QUICK CABLE TELEGRAPHING. The 1877 University boat race between the Oxford and Cambridge crews was rowed on the Thames March 24th. The finishing gun was fired at 8.51 A. M., the result cabled to the New York *Herald*, put in type, read, corrected, stereotyped, and the plates placed on the presses at 4.30 same morning—apparently four hours and twenty-one minutes before the race was rowed, and in actual time only forty minutes after the finishing gun was fired. New Yorkers read the result at their breakfast table, while Londoners had to depend upon extras and the afternoon papers of the same day for a report.

SINCE speaking in last issue of the A. & P.'s proposed 10,000 miles of new line, we have received numerous inquires as to the prospects of obtaining employment with that company, the address of superintendents, etc. For the information of such inquirers we give the names of the A. & P. superintendents as follows: D. H. Bates General Superintendent Atlantic Division, 145 Broadway, New York; Charles A. Tinker, General Superintendent Central Division, Chicago, Ill.; R. P. Hammond General Manager Pacific Division, San Francisco, Cal.; William C. Humphreys Superintendent, Cleveland, Ohio; J. J. Dickey Superintendent Union Pacific R. R. lines and F. L. Vandenburgh General Superintendent Central Pacific R. R. lines.

Some Suggestions to Our Contributors.

WE receive from time to time for publication a great many articles which, for various reasons, we are unable to publish. We desire now to point out a few of these reasons, and to say a word generally on the subject of writing for THE OPERATOR.

Perhaps one of the most frequent causes leading to the "waste basketing" of an article is the very reprehensible habit so many writers have of speaking of towns by their call, and operators by their "signs." It may be of absorbing interest to the persons immediately concerned, and possibly to half a dozen others on the same wire, to know that the versatile and accomplished "Pq." of "Xy," is the very soul of wit, a perfect Chesterfield among the ladies, wafts lightning at a speed that would make Stanford, of Boston, blush for shame, and can clean a battery in seven different languages. But 25,000 people will read that number of THE OPERATOR who know nothing of either "Pq" or "Xy," and care considerably less. Our readers are scattered all over the civilized world. Not only does the paper circulate in every city and town of importance in the United States, from the Atlantic to the Pacific, but it is largely read in Canada and throughout Europe—even penetrating into Sweden and Russia. It is read at the antipodes. We have subscribers in New Zealand and Australia. We owe it, therefore, to these readers that nothing of merely local interest takes the place of matter which will be of interest to all.

Another reason why articles are discarded is the omission of the writer's full name and address. This is never published or seen by others than the editor, but is required as a guarantee of good faith. An operator in the Dominion, who, in his letter, omits name, town, and date, exhibits much unconscious wit when he appends to his article the injunction: "Please don't mention where this is from—that is, what city in Canada." We didn't. A third and very important reason is that articles are entirely too long—to verbose—would occupy more space than we can possibly surrender to them. Josh Billings says: "Eight won't go into six and leave anything over. Many a man has demonstrated that fact when he tried to get a number eight foot into a number six shoe." It is precisely the same with a newspaper. You can not crowd eighteen or twenty pages of matter into a twelve or sixteen page paper. Excellent articles are, therefore, sometimes omitted, merely because we have not the space to publish them.

Some articles again are not up to our standard, contain nothing that would interest the general reader, are carelessly written, and as innocent of punctuation as the noon-day sky. We don't mind the punctuation, however, though it sometimes leaves us in doubt as to our correspondent's exact meaning. Take, for instance, the following: "A nice little boy made his appearance last Wednesday, yet I can still afford to subscribe for THE OPERATOR. We call him George Carlisle Eight pounds." A delightful name, truly. But perhaps, under the circumstances, this little slip can be overlooked. Here is another: "I must either send a letter to THE OPERATOR or burst, and am certain that by so doing I shall earn the eternal gratitude of the fraternity in this section." Can our correspondent mean that his bursting would have so gratifying effect upon his co-laborers? Surely not.

Here is an item received last week, which, like everything else quoted in this article, we give *verbatim et literatim*. The penmanship is unusually fine; it is well enough punctuated, but the matter it contains is of no manner of interest to telegraphers generally, and, besides, who knows either "H" or B?

Our genial friend "H" at B has taken to "Brandy and *absence*" probably in the belief that "Absence conquers love. He evidently seeks a panacea for unrequited affection. 'Twas ever thus, etc. Wonder why, but they *dont* seem to "felicitude" as much as they used to "*feliss*". The boys say he was Ruled out. It is noticed he grits his teeth *hard* at any mention of Rule. He contemplates retiring into a nunnery to hide his woes from the rude gaze of an unfeeling community.

Perhaps it is none of our business, but if the genial "H" contemplates isolation, "the world forgetting by the world forgot," we would recommend a monastery in preference to a nunnery. Some essay writing in verse who we are afraid were never intended by indulgent nature to shine as poets. Wordsworth says that "there is a pleasure in poetic pains that none but poets know." Perhaps that accounts for the large number of "poets" in the country. We think it was Pope who spoke of an effort in this direction as being "so sublimely bad, it was not poetry but prose run mad." For example, here is a soul-inspiring ditty entitled:

THE HOME OF THE "PLUG."

I will sing you a song of that beautiful land,
The far away home of the plug:
Where storms ever beat, with pleasure to greet,
A young man to the "Plug Factory" out west.

Come all ye poor Plugs who live in the west,
We warn you as friends to stay where you are best,
Go back to the "Plow," it needs you I know,
Don't Graff! you are a Plug! the worst of all souls.

Editors, you see, have tribulations like other folks. We give the above merely as a sample of the articles we receive. Now, a word of advice to contributors. We are always pleased to hear from you, but be brief; put whatever you have to say in the very smallest possible number of words. "Boil it down." Personals are almost always published, even when we cannot find space for a long letter. Never write when you have nothing to say, merely for the purpose of seeing your literary efforts in print; and only send such items as will be likely to interest the general reader. If you will bear these suggestions in mind, it will save you the mortification of having your article declined, and us considerable unnecessary labor. This article is not intended to discourage any one from sending us items. We are always pleased to receive a report of anything occurring in any part of the country of interest to telegraphers. We merely desire to impress upon correspondents the necessity of writing pointedly and epigrammatically, that all may have an opportunity of appearing in THE OPERATOR.

Telegraph Colleges.

A party by the name of Gilbert in Olathe, Kansas, advertises in a flaming poster three feet long: "Ho! for the Black Hills! Gold! Gold!! Is not knowledge better than gold?" and then goes on to say that he is prepared to teach any number of young men telegraphy in all its branches at the remarkably low figure of $150 each for all expenses. In his generosity he even guarantees "a situation to every honest, straightforward, and energetic young man after graduating who brings a good letter of recommend (*sic*) with at least four signers." Magnanimous, large-hearted, philanthropic Mr. Gilbert! They call it "bleeding" Kansas, you know, and Mr. Gilbert merely desires to "bleed" any number of its denizens that will walk into his parlor. As to the conundrum, "Is not knowledge better than gold?" we would say that if Mr. Gilbert refers to the knowledge of telegraphy he is likely to impart, we would prefer the gold.

Two "enterprising" knights of the key in Milwaukee, contemplate erecting a magnificent "college" on one of the islands in Menomonee Marsh near that city—a delightfully soft spot we should say for a "factory," corresponding well with the heads of the parties who are expected to patronize it. Milwaukee, however, should produce splendid "sound" operators, if the size of her citizens ears counts for anything. You remember Elisha Gray first exhibited his telephone there—it was the only city where the then faint strains of the harmonic system could be recognized, and when Mr. Calahan in his burlesque on the telephone drew the ears of the men who command the different grades of salary, he did not omit a Milwaukee ear.

Those engaged in the disreputable business of setting adrift these little waifs of humanity upon the sea of telegraphic life, are to a great extent, responsible for the present demoralized state of the telegraph business. Knowing this, as all practical telegraphers must to their sorrow, we do not see how any respectable operator not utterly devoid of that principle which teaches us to do unto others as we would be done by, can possibly so far stifle conscience as to embark in such an enterprise. Surely there are enough dead beats and swindling telegraph college men who either do not desire or can not obtan honest employment, at present dragging the business down, without telegraphers themselves lending a hand. Every operator in the country should persistently set his face against telegraph colleges and institutes, and use every lawful means in his power of sweeping them off the face of the earth. The Western Union does all it can to encourage them, because in the face of an overcrowded market it can get operators to work for very small salaries. Let not telegraphers follow its example, but let them wage persistent warfare against every description of "plug factory," and perhaps in years to come, we shall find these banes of our lives grow smaller and beautifully less, until they at last almost entirely disappear from our midst. "So mote it be."

Lightning Flashes and Electric Dashes.

In another part of to-day's issue we give a number of cuts from the new book, Lightning Flashes and Electric Dashes. Mr. Calahan's latest pictures, "A Lull in the Ladies' Department," and "The Telegrapher's Dream," both drawn for Lightning Flashes, are in that excellent artist's very happiest style. We are confident that the book will be heartily welcomed by telegraphers, whose appreciation of a good joke is only exceeded by their admiration of well executed pictures. As the book is interesting to outsiders as well as telegraphers, we would be glad if our readers would draw the attention of their friends to it, get at least two others to join them, and order three copies at $3.75.

A Lady's Modest Request Becomingly Acquiesced In.

We are always pleased to hear from the lady members of the fraternity. Here is a note from one of Philadelphia's fair operators:

DEAR OPERATOR:

Will your allow a very obscure member of the profession to indite a few personals? [Certainly.] I'll not trouble you often. [No trouble.] I think the high and mighty first-class men are monopolizing too much space. [Possibly.] *Please* do not publish my name. [All right.]

PERSONALS.—Mr. Robert Parkes, of the Baltimore Depot, finds considerable attraction at one of the down-town offices. We hope to congratulate him soon. We are glad to see Mr. Foley making extra occasionally. His moustache is sweeter than ever. Charlie Hall accidentally came on time one morning, recently, but promised not to do so again. Why does Mr. Albert Wright, of Trenton, cut his Philadelphia friends when he visits the city on Sundays?

Mr. Albert Wright, of Trenton, will please explain this barbarous treatment of his Philadelphia friends. He will probably ask us to believe that it's Al Wright, but we must insist that the next time he leaves benighted Jersey and meanders in the direction of the Centennial City he will not fail to call upon our fair correspondent.

Answers to Correspondents.

I am constructing a private line four miles in length. Please inform me through your paper. 1. How deep should I place my ground plates, and 2. How large should they be?—E. E. P.

In damp ground three feet deep. Four square feet of surface.

Will you be kind enough to state in your next issue how many miles of telegraph wires there are in the United States, and how many in the principal countries of Europe?—C. P. W.

The Western Union has a little over 120,000 miles of wire, or about enough to go completely around the world five times; the A. and P. probably about 12,000 or 15,000, and railroad and other companies perhaps enough to bring up the aggregate length of wire in the United States to about 175,000 miles. In the whole world there are over 400,000 miles of telegraph wire. We are not at this moment familiar with the exact number of miles of wire in the several European countries.

Can a bird be killed or feel any shock by sitting on a telegraph wire while in use, or when a message is being transmitted? By answering you will greatly oblige and settle a disputed question. —A. P. LUG.

No. If the bird is particularly desirous, however, of bursting the ties that bind it to this world, it can generally do so expeditiously and neatly by striking its head with sufficient force against the wire. But it can never "suicide" with any degree of success by merely perching upon a telegraph line, any more than it could by taking up its position on a clothes line.

Considerable having been said in your interesting little paper about "plugs," I feel quite anxious to know if there ever existed, or is now in existence, an operator who never was a "plug." If so, could you favor us with his or her picture in your next issue?—A LADY PLUG.

If our fair correspondent desires our photograph, it will afford us much pleasure to accommodate her, but on account of our extreme modesty and innate bashfulness, she really must not ask us to publish it in THE OPERATOR.

Themes for the Thoughtful.

The mind of guilt is full of scorpions.

The best head cannot atone for a bad heart.

The deeper the sorrow the less tongue hath it.

As if you could kill time without injuring eternity!

Ignorance often exclaims, and declaims; it seldom reclaims.

A whisper can dispel the slumbers of hatred and of love.

Grief is the culture of the soul; it is the true fertilizer.

Poets, fiddlers, and beggars, are always dull in dull weather.

Those who complain most are most to be complained of.

That man lives greatly, whatever his fate or fame, who greatly dies.

He shall be immortal who liveth till he be stoned by one without fault.

Life is not the supreme good; but of all earthly ills the chief is guilt.

No advantage is so complete, but it is attended with some disadvantage.

Learning without thought is labor lost; thought without learning is perilous.

As words can never be recalled, speak only such words as you never wish to recall.

Evolution could accomplish nothing had not a divine sower first gone forth to sow.

Let your company either please, instruct, or transport, if you would have it sought for.

Copiousness and simplicity, variety and unity, constitute real greatness of character.

Nothing can make a man truly great but being truly good and partaking of God's holiness.

Wits seldom are prosperous; and prosperity has brought many a man to the end of his wits.

Gentleman is a term which does not apply to any station, but to the mind and feelings in every station.

They that stand high have many blasts to shake them; and if they fall they dash themselves to pieces.

Talent lying in the understanding is often inherited; genius, being the action of reason or imagination, rarely or never.

Never judge of the preacher's piety by his professional zeal; the semblance of righteousness may be put on as mechanically as a surplice.

A fool's enmity is less fatal than his friendship; they are both to be apprehended, by kindness or inadvertence, they are both occasioned.

Were I but free from sin, and the world around me free from it, I would crave no better state and no finer heaven than that into which I was born.

The real gentleman should be temperate in everything, at least in everything that depends upon himself—in carriage, temper, constructions, aims, desires.

To conquer trifles is an irksome, not an impossible, task to a lofty mind; the difficulty must [illegible] to its faculties; when it is superior, the trifle neglected subdues the greatest.

The poor man who envies not the rich, who pities his companions of poverty, and can spare something for him that is still poorer, is, in the realms of humanity, a king of kings.

There is always something great in that man against whom the world exclaims, at whom every one throws a stone, and on whose character all attempt to fix a thousand crimes without being able to prove one.

Truth has always [illegible] though it is in [illegible] the support of [illegible] The [illegible] of every [illegible] composed of men who [illegible] citizens by their [illegible]

The man who cannot [illegible]
[illegible]
None [illegible] the man who [illegible]
[illegible]
[illegible]
And just a weaker [illegible]

Mr. Talmage's Sermon to Telegraphers

Rev. T. DeWitt Talmage preached to telegraph operators at the Brooklyn Tabernacle on Sunday, March 18th. A considerable number of telegraphers were present, but, as they were scattered over the house, it is impossible to give anything like a correct or complete list of names. The sermon was very interesting, and, as many of our readers who could not be present may desire to read it, we append a pretty complete synopsis.

Mr. Talmage took for his text—Job xxxviii. 35—"Canst thou send lightnings, that they may go, and say unto thee, Here we are?"

Yes, we can, said Mr. Talmage. It's done thousands of times every day. Franklin lassoed the lightnings and Morse put on them a wire bit, turning them around from city to city, and Cyrus W. Field plunged them into the sea, and whenever the telegraphic instrument clicks at Valencia or Heart's Content, or London or New York, the lightnings of heaven are exclaiming, in the words of my text, "Here we are, we wait your bidding; we listen to your command." I wish to recognize the fact that telegraph operators have their hand on momentous interests to all, and that they have trials and annoyances which prove that their nerves are not, like the telegraph, made of wire, and in the name of our all-sympathetic Christianity I address them—"Canst thou send lightnings, that they may go, and say unto thee, Here we are?" Yes, that's your regular business.

In the first place, I charge you to give gratitude to God for the fact that He has made you the means of so much advantage and blessing to the world. Oh, what a stride from the time when the Roman generals were depending upon signals by the bonfires kindled on the mountain top; from the time of the rotating beam, upon which the world was depending in after centuries down on from those days till this time, when one telegraphic company sends 20,000,000 dispatches in one year, and, if I am rightly informed, 20,000 last Saturday week. Oh, what painstaking since the day when Thales, 600 years before Christ, discovered frictional electricity by the rubbing of amber, to this time, when Faraday and Morse and Prescott and Orton—some in one way, some in another—have helped the lightnings of heaven to come bounding along, crying, "Here we are!"

What mean all those storm signals at Barnegat and Hattaras and St. Johns and Key West? Why, they mean that the telegraph has gathered the weather reports all over the land, crying, "A tempest is coming!" There are thousands of sailors asleep amid the corals and seaweed who this morning would have been alive had the signal service been invented sooner. What means all these trains going along the Hudson River and the Erie and Pennsylvania lines, with less comparative loss of life than in the time of the old stage coaches? The telegraph wires are hurrying around these chariots of fire and millions of people traveling both ways in comparative safety. What has this art done for literature? One of the great curses of literature is verbiage—great long sentences and a whole pack of hunting adjectives after one poor noun. The economics of telegraphy say: "Put what you have to say in ten words or pay extra." Under this mighty pressure the land is learning the beauty of brevity. Why be so spendthrift of words? With four words God ordered the illumination of two hemispheres—"Let there be light." With five words the archangel shall preach the funeral sermon of the world—"Time shall be no longer." The world is being talked to death, and the American telegraph is helping to abate the nuisance. In sickness, how quick it brings the physician! A [illegible] put out in five minutes! You are in a distant hotel, and in a paroxysm of pain. No railroad train could carry your message swift enough. You telegraph home, "Come," and very soon upon your dying vision there appears the familiar and sympathetic face of her who has been to you as a guardian angel ever since the day when you put the ring on her hand. There is not a home in Christendom that is not benefited by the telegraph. Churches are benefited by the reports of their conventions brought by telegraph. Every morning the secular and religious news of the world is put on our breakfast table by the telegraph through the newspaper, the newspaper press of this country in one year paying $500,000 for telegraphic intelligence, and the continent of Europe $1,000,000 for telegraphic intelligence. The American [illegible] lands in the arms of the Liverpool [illegible]. To arrest crime, to scatter good and strike the common note of universal accord, God has ordained the telegraph. I am very glad to know that woman, shut out from so many places of employment, has been admitted here. People are better behaved and more elevated in conversation where women are. Isn't that so? If it isn't, why do we all love to get into the ladies' cabin of the Fulton ferry boat? (Great laughter.)

Don't let your art be a mere matter of work. I preach this sermon to magnify your office, and to stir up in your soul appreciation for the grandeur of that work to which God has called you. Again, I charge you that you maintain inviolate all the confidences intrusted to you. Through no other hands do there go so many things never invented for the public ear. At this point let me say that I think all judges of courts and the national government ought to be very slow to bring in private telegrams as evidence. What a scene it was when Mr. Orton was brought before Congress to bring forward private telegrams. It is a simple fact that the men who did that were scorched with their own lightning, when the lightnings came and said, "Here we are." "Yes," they said, "and I wish I had never seen you." (Laughter.) The letters of the post-office are no more sacred than a telegraph, and public officials ought to be very careful lest they cripple this great influence. There are a great many people tempted to tell all they know, especially when they don't know much. Men talk too much, and women too.

To others your work seems as easy as playing on a piano, but since you began to learn the art you have not been free from annoyances. The story of the telegraph has been the story of trial and trouble. It has been struggle, struggle, all the way up and all the way down. Sabastopol and Austerlitz and Gettysburg were not less struggles than this. Wellington won no better victory at Waterloo than Cyrus W. Field when he landed the cable at Heart's Content. The pioneers in telegraphy were the target for the jeers of two hemispheres. The United States government, time and time again, has attempted to steal the telegraph lines of this country and make them a mere system of political jobbery.

But is there no comfort in any department of this wonderful art? I have to tell you to-day that God's word is charged with comfort, and if you but touch it you will feel the eternal thrill. Your message sent to a long distance may seem to arrive at an hour earlier than when it was sent; but here is something that beats all telegraphy, the promise of God: "Before they call I will answer, and while they are yet speaking I will hear." God is ever ready; go to Him. Do you not already feel the shock of the Lord's battery? No people in all the world have such an opportunity. God is not in the storm or the earthquake so much as in the telegraph. You every day have your fingers on the pulses of the omnipotent arm. You ought to have better appreciation than most people that the Lord is not far from any one of you. Working as you do, with such tremendous agencies, you ought to be the most devout of all Christian, people. Are you? I lift the storm signal to-day. There's a day coming which will try every man's work, no matter of what sort it is. In Christ all are safe; away from him, all are in peril. If I had the telegraphic wires of the world, and I could send only one message, I think it would be this: "Come unto me all ye who are weary and heavy laden, and I will give you rest." I am glad to know that God is coming to take possession of the world's telegraphic instruments. The thought stirs my soul. After a while, when all the telegraphic lines are completed, and instead of four or five wires through the ocean to Europe, there will be twenty, and the wire of the telegraph shall insinuate itself into the most hidden dwellings of the human family, then, methinks, there should be some great central office, and the operator should put his hand on that instrument and give the final call to all nations. Yea, perhaps Christ himself may put his hand on that instrument and give the official and the successful call to all people, thrilling to all lands the message: "Look unto me, all ye ends of the earth, for I am God, and there is none else," and all the nations, instantly catching the invitation, shall respond, and China shall say, "I come," and India shall say, "I come," and Siberia shall say, "I come," and Russia shall say, "I come," and Europe and Asia and Africa and North and South America shall say, "We come." Nations born in a day, empires saved, the world's work done, God glorified, heaven full!

> The dumb shall sing, the lame his crutch forego,
> And leap exulting, like the bounding roe;
> No sighs, no murmur, the wide world shall hear,
> From every eye he wipes off every tear;
> In adamantine chains shall Death be bound,
> And hell's grim tyrant feel th' eternal wound;
> The steer and lion at one crib shall meet,
> And harmless serpents lick the pilgrim's feet.

God hasten the day! And then the galvanometers may melt and then the Atlantic cables may snap, and the lightnings of heaven shall kneel at the foot of the throne crying, 'Here we are!'"

* * *

Ruined by Chinese Cheap Labor.

The late disastrous fire on Bond Street in this city, by which a loss of about $2,000,000 was incurred, is one of the most noteworthy examples of corporation economy that has ever come to our notice. The "Waltham building" was fitted up throughout with the apparatus of the Automatic Signal Telegraph Company. This company was organized three or four years ago, its object being the prevention of large conflagrations by the introduction of thermostats, connected with a signal telegraph system similar to that used by the regular fire alarm. These thermostats are made of metal, in such a manner that the influence of heat causes a spring to expand, which, at a certain high degree of temperature, closes the circuit by a ground connection, and thus releases the clock-work in an automatic signal box. By this arrangement the number of the building, and the particular floor on which the box is located, is instantaneously transmitted to the central office, which in this city is located at the quarters of the Fire Insurance Patrol. Any intelligent operator will readily understand how these results may be accomplished, without our entering into the details, which is not the purpose of this article. Such a system, in order to be valuable, however, requires the constant supervision of intelligent men, well versed in electricity and mechanics. They must be thoroughly trained in the service upon which they have entered, for they cannot be picked up "ready made" at a moment's notice. Every subordinate in a service of this kind should be a man of good judgment, for it is the nature of such a system to bring up sudden and unforeseen emergencies, which should be met by that intuitive faculty, so valuable in all responsible positions, of knowing exactly what to do without preliminary experiments.

About a year ago a sudden and thorough change was made in the entire management of the company, and a reduction of salaries inaugurated, compared with which the celebrated yet infamous sliding scale was but mildness personified. Inspectors' salaries were reduced about thirty per cent, and even the new Superintendent, who was promoted from the ranks, was out of pocket $3 per month by this remarkable change in affairs. The defects of this system have never been thoroughly eradicated, and false alarms were at one time so frequent that the Insurance Patrol would not turn out until a man had been sent to ascertain whether there really was a fire at the location given by the signal. We understand that a false alarm was the primary cause of the failure of the system in this instance. A transmitter had started off accidentally at another point on the same circuit, and continued signalling until it finally ran down and left the circuit grounded. Until this fault was removed the system was imperfect. We have yet to learn whether sufficient time had elapsed before the fire on Bond Street started to remedy this difficulty, but in all probability this great destruction of property would have been prevented had the circuit been in perfect working order. During the interval between the false alarm on the same circuit and the actual alarm from the Bond Street fire, an attempt was made to send the signal over the Morse wire connecting the Patrol stations with the central office of the City Fire Alarm Telegraph. The sending operator, however, is said to have been so incompetent that the Morse characters he made were unintelligible, consequently the signal would not have been acted upon even had it been important. The truth seems to be that this company takes the chances of a fire occurring where all is prepared for it, as it seems to be quite a general practice to disconnect buildings from the circuits in case of wire trouble, trusting to luck that no fire will be started in that particular building at that particular time.

Although it will be a comparatively easy matter to attribute the failure of the system to that overruling Providence which has proved the refuge of so many corporations under similar circumstances, it is doubtful whether any officer of the company will assert that they have taken sufficient pains to select their employés with reference to their ability, or have paid them such salaries as other companies are compelled to in order to secure and retain a competent corps of inspectors.

The Bond Street building destroyed was fitted up with the apparatus of this company. The alarm was not received at the Patrol station until the building was thoroughly on fire and the City Fire Department on the ground. Did the system fail on account of its general worthlessness, or for the lack of prompt, intelligent, and careful supervision by vigilant managers, supported by a well-paid and skillful staff of competent subordinates? This is a question of no little interest to the insurance companies of this city, and we presume the facts of the case will be thoroughly investigated, so far as it can be by men who have had little or no experience in the telegraph business. We presume that the Superintendent of the New York City Fire Alarm Telegraph could show them a radical difference in the *personnel* of the two organizations, which require similar qualifications to render them capable of giving the public the full benefit of efficient protection from fire.

The New York Wire Club.

A sombre look clouded the brow of Jerry Borst as he called the meeting to order. He said that his position as historian of the club made it incumbent upon him to announce to the members that to-day they were without a President. He held in his hand the resignation of Mr. Gibbons. (Sensation.) Frank Cox moved that the resignation be accepted, saying that Mr. Gibbons had been absent several times, and the refining influence of the Wire Club seemed to be entirely lost upon him. The resolution was unanimously adopted. Miles O'Reilly said he took great pleasure in nominating Mr. D. Brown for President. Denis Brown, upon taking the floor, was received with marks of approval. He thanked the members for their evident partiality toward him, but it was impossible for him to accept. He was a German, and would soon have to return to his native land to fill out his allotted term of military service. (Cheers.) Mr. Gramzow nominated Patsey Sheehan. Mr. R. G. Stephenson objected. He said that Mr. Sheehan was a Pole, and it would not only be impolitic, but would show that the club lacked common courtesy if it elected a native of Poland President of the society while the Russian Grand Dukes were on a visit to our city. (Loud applause.) R. Board Howlett suggested that it might be well to appoint a commission to elect a President. His remarks were received with derision. Morris Brick hoped that the question would be laid over until the next meeting. It had an important bearing on the welfare of the club. He deprecated hasty action. As this was evidently the sense of the meeting, the subject was so disposed of. Gus Coleman called the attention of the members to an article in *The Sun* of March 21st. It reads: "If there is any class of men who more than another need preaching to, we should say they must be the telegraph operators." He would like to hear the members' opinions about the article in question. Tom Allen thought that our mode of life and associations had much to do with shaping our characters. He quoted Bob Ingersoll as saying that if five thousand preachers and five thousand of the ruling class were taken from New England and placed in Santo Domingo, the next generation would see them riding on mules bareback and going to cock-fights on the Sabbath. (Laughter and applause.) Mr. E. F. Welsh said he would like to hear Mr. Dana or some other smart man touch on the following points: 1st, coming to the office late in the morning; 2d, getting back late from dinner; 3d, making a bad average; 4th, taking no interest in the business; and 5th, absenteeism after pay day. Many other points might be given, such as a too hasty departure in the evening, etc., but the above would do for a groundwork. Bob Morris then came forward, and by special request sang "Put My Little Shoes Away." He was enthusiastically cheered. Mr. D. Harmon, Jr., hoped that our brilliant association would not be another proof of what the immortal Shakspeare once wrote, "So quick bright things come to confusion." The resignation of our presiding officer should not demoralize us. (Applause.) Fred Baldwin announced that at the next meeting he would read a paper entitled "The Boston Fire," which would prove of interest to the members. The meeting then adjourned.

Chicago Western Union Notes.

Colonel Wilson's rooms on the ground floor of the Union Building have been moved to the fourth floor of the same, fronting on Washington Street, directly under the operating and Gold and Stock Telegraph Co.'s rooms. The next room north, on the same side of the building, is occupied as the electrician's room, and is fitted up with a long testing table, various kinds of testing instruments, a large switch-board, etc. In this room is found the library of the American Electrical Society. The last room in the east side of the buiding on the fourth floor is now occupied by the Associated Press. Here will be found Hon. William Henry Smith, and Messrs. French, Thomas, and assistants. This office is connected by large folding doors with the electrician's room. The rooms are so arranged that they can be thrown open and virtually turned into one for the use of such societies as the American Electrical, Chicago Electrical, etc. The Associated Press having moved up-stairs, gave General Stager a chance to rearrange his office, which has been done with great credit to all concernéd in the fitting up. Here will be found the General himself when in town, and during seasonable hours Messrs. Dresslein, short-hand reporter, Colonel Lynch, Mr. Vigus, and Mr. Amsden, late of the operating force. No changes to speak of have occurred since my last in the operating room; there are some talked of, however, of which more anon. It seems to be the desire of the Western Union management here to make everything as pleasant for the employés as possible. A barber chair with a first-class barber to go with it has been stationed at the foot of the stairs from the operating room on the fourth floor, and the boys are allowed time to get shaved. The coat room and lunch room on the same floor, directly opposite Colonel Wilson's rooms, have been completed, the former is not yet occupied, but the latter has been in full blast for several weeks, and demonstrated that the proprietors, although novices at the business, bid fair to become first-class caterers. Messrs. Billy and Henry McMillan are the proprietors. The former, the well known and popular chief of checks of the operating department, Sunday receiving clerk, etc. The latter of the firm of McMillan Brothers, photographers, but formerly an old operator. Although Henry is a photographer, those lunches are not photographs of a first-class meal by any means, but a first-class meal itself in solid substance and for very moderate prices. Everything is first-class in every respect. Billy is the local agent for The Operator, and copies of the paper for any date can always be found on hand at the lunch counter to accommodate those who do not care to subscribe by the year.

The Ninth Regular Monthly Meeting of the Chicago Electrical Society was held in the electrician's room, No. 31, fourth floor, Union Building, on the 15th ult., and was a decided success. Mr. F. W. Jones' lecture with illustrations on electro magnetism was a very fine affair. The music furnished by the music club of the society was its first attempt as a musical club. Since then the social and musical features of the society have been brought out more strongly. Meetings of the club have been arranged for every Tuesday evening at the residences of the different members. Mr. Elisha Gray recently, under the auspices of the American Electrical Society, gave a very interesting lecture on the telephone, during the course of which he paid a high compliment to Professor Bell, of Boston. The recent additions to the extra force in the W. U. main office are Messrs. Burt Ayers, of New Orleans, known as "Patsy," Chet Andrews, of the Board of Trade Telegraph Company, and Professor E. Payson Porter. Messrs. Day and Beidler, of the day and night force respectively in the W. U. office, have changed places on the second New York duplex and St. Louis quad. There have been some important changes recently in the manner of working off the business in the W. U. office, whereby the chief operator's duties have been somewhat lightened. A position entitled, "Chief of quad" has been introduced. The position is more of honor than otherwise; the chief of quad being responsible for the business on his quad, and, although it places those appointed to such positions in the line of promotion, there is no authority attached to the position. The way wires, nights, have been arranged also with one operator in charge of three or four wires similar to the work on the quads. I will give the details and promotions to those positions in my next letter, as Manager Maynard has kindly consented to give them to me in full.

Prominent among the recent arrivals here is Mr. Vestal, of Nashville, Tenn., brother of Chas. R. Vestal, the noted fast sender. Mrs. G. C. Felton, formerly of the W. U. main office, has started on a two weeks' tour among her friends east, after which she returns to this city and joins her husband, of the W. U. supply office here, in San Antonio, Texas., where he has been for some time for his health which became very poor, the result of his close application to his duties in the supply office where he has been for a number of years. The Board of Trade Co. is doing a large business here, and, in fact, all along the line, and it is being done with great satisfaction to its patrons, everything working smoothly and harmoniously. They now have a new route to New York *via.* Buffalo which they can use in case of an emergency. Mr. E. D. L. Sweet is confined to his house with rheumatism. H. P. Nelson is working the second Milwaukee for this company in Milwaukee. C. D. Meserve has gone to Milwaukee to stay a month during the absence of C. L. Fortier. Ed Dennis, formerly of A. & P. and lately with Gifford, Clark, and Knight, is working for this company now. Dr. A. G. McCabe has been appointed chief operator. H. S. Waters is working for this line in Chicago. R. Newell is manager of this company's Buffalo office.

Occasional.

Chicago A. & P. Items.

The gossip from Chicago is, as a rule, confined mainly to "the shop over the way" (W. U.) I intend to vary the monotony by giving you an occasional item about the A. and P. boys. Changes of late have been quite numerous. The office has been illuminated by many "bright particular stars" in the telegraphic firmament, but their ill-star-red fate, like that of the Wandering Jew, or the unfortunate victim of the conscientious and watchful "peeler," keeps them constantly "moving on." We have been blessed with "Scarred face Hank" (Cowan). He remained long enough to get his boots rebuilt, and then strolled over to the village of St. Louis. "Tho' lost to sight, to memory dear." Then came "Jack" McConnell, the famous pedestrian. Jack has a decidedly "taking" way about him. He took his departure from this burg because the water didn't agree with his system. Merely this, and nothing more. Bogardus hasn't arrived yet, but the roads are not in condition to make good time on just now, and freight trains are proverbially slow. Charley Hazelton is again with us, after a protracted and severe illness. He helps to enliven the "owls" and the feller at t'other end of his wire. The latest acquisition is Mr Spencer, from Peoria; writes a beautiful Spencerian hand. Ramsey graces the Omaha wire, *vice* Father Allen. He is an ardent admirer of Pat Rooney, the Irish comedian, and seriously contemplates giving up telegraphy to become a disciple of Momus. We'll give you timely notice of his *début.* Hans Reile, a pilgrim from over the Rhine, worries the St Louis wire. He is a *real* good artist and a first-class judge of [illegible]

[illegible] Mr. Kaylor, an Americanized Frenchman, keeps [illegible] clear, and the boys in line. [illegible] a fancy young artist, is what his name indicates, but it isn't so much. He is [illegible] "puncher," or [illegible] for the [illegible] [illegible] can do [illegible] [illegible] [illegible] Chicago. He undertook to pursue a gentle [illegible] the other evening [illegible] at 4 a. m., and as it [illegible] the [illegible] of [illegible] he was endeavoring to [illegible] with his [illegible] ancient [illegible] line in the [illegible]. William [illegible] still [illegible] illiterate check, is not [illegible] by the [illegible] of the [illegible] word, but is [illegible] check. Johnnie Clark, the celebrated American tourist, works Buffalo [illegible] wire, and [illegible] as lively and gracefully as ever. What Johnnie can't take isn't worth taking. I trust none of your readers will misinterpret this remark. He took a severe case of diphtheria a short time since, but didn't keep it very long. Wasn't the sort of "case" he hankers after. "Johnnie" Powers labors on Buffalo "Cx" wire. He goes "on change." Sometimes he "bulls" the markets and sometimes some one else does it, but he "bears" the [illegible] and troubles incidental to the business with Christian resignation. It is rumored that he has joined the church and teaches a Bible class somewhere in the suburbs. Judging from his familiarity with the Scriptures, I think it highly probable. Ed Angell, the "solid" man, presides over "Cx" office, where the "longs and shorts" most do congregate. Ed is neither long nor short, but a happy medium—not a spiritual one, although, paradoxical as it may seem, he is always in good spirits. Nothing cheap about him. It would do a dyspeptic good to gaze on that Angel-ic countenance and listen to one of his ever-ready funny yarns. He never shrinks from hard toil, but says he "can bate any man in the wurruld doin' aisy wurruk." The sylph-like Ludlow fills the Milwaukee chair—fills every inch of it. Mons Myer takes care of Cincinnati, and does it ad-Myer-ably.

I reserve the night force for a future communication. Business with us is literally rushing. Nearly every wire is duplexed, and scarcely a moment idle. The men work with a will, and there isn't a solitary "old sojer" in the office. This fact is worthy of mention, when we consider how many of that class are to be found in nearly all large offices. The recent general reduction in rates by this company has thus far proved a [illegible] and profitable card. The absorption of *The Telegrapher* by *The Journal* caused no little surprise to the fraternity here, and many, among the rest your correspondent, sincerely regretted its demise. I, as well as the majority of my co-laborers, devoutly wish it had consolidated with THE OPERATOR instead of the W. U.'s tariff sheet. Well, what's one man's loss is another man's gain, as your subscription books doubtless attest.

[illegible] [illegible]

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Parlor City Notes.

The undersigned has been "interviewing" this great telegraphic center of the southern tier. (Elmira will undoubtedly raise a point of order on this assertion.) Our first call was at the W. U. main office, Court Street, where we found Manager Arnott and the boys in good spirits. Goulden and Bresee, both old timers, still hold forth here, this being their fifth year together in this office. J. C. [illegible] is night press man. John says he don't wink at forty-two words a minute for an hour. I noticed a new switch-board, which holds twenty wires, and is very convenient as well as ornamental. Our next call was on Brown, at the depot. He is as jovial as ever. The change of the A. and S. wires to his office makes more work, but George says he thinks he can keep his end up. He is going to housekeeping soon, having lately taken unto himself a better half. Norman Barnes is night operator in this office. We found Johnny Hogan at the D. L. and W. freight-house. He has a very tidy office. Johnny is a good operator, and blows a big horn in the band. We also dropped in on Chatterton at the A. and S. freight-office. Chat. was formerly ticket agent and operator for the A. and S. at the depot, but this office being closed, he has been transferred to the freight-house. Mr. Fitzsimmons is the operator at "Y" office. Joseph Schnell, Jr., formerly manager of the W. U. main office, and an old telegrapher, is now druggist in the little store around the corner. I must not forget to mention the pony telegraph, a private line put up by Mr. J. F. Noyes, which connects with the houses of Bresee, Goulden, and Noyes. It is very handy to have in the house, besides affording a pastime for the ladies who visit by electricity.

BINGHAMTON, N. Y., March 1877.

The Western Union's Quarterly Meeting

The quarterly meeting of the Western Union Telegraph Company was held in this city March 14th, President Orton in the chair. The net profits for the three months ending December 31st, 1876, were $916,158.30 or $14,604.36 in excess of the estimate made at the last quarterly meeting, December 13th. The profits for the quarter ending March 31st are estimated at about $775,616.43. A dividend of 1½ per cent was declared. The official reports for the last six months of 1876 having been made up since the last meeting of the Board, it is now practicable to make a comparison of the business of the calendar year 1876 with that of 1875, which is as follows:

	Calendar Year Ending	
	Dec. 31, 1875.	*Dec. 31, 1876.*
Receipts	$9,821,749 36	$10,078,997 91
Expenses	6,602,953 88	6,641,947 47
Profits	$3,218,795 48	$3,437,050 44
Increase of profits in 1876 over 1875		218,254 96

The company on the 31st of December, 1876, had a surplus of $249,395.09. The growth of the company's property and business during the year is shown by the following comparative exhibit of the miles of line and wire and the number of offices on the first days of January, 1876 and 1877, and the number of messages sent in 1875 and 1876:

	Jan. 1, 1876.	*Jan. 1, 1877.*	*Increase.*
Miles of line	73,517	77,092	3,575
Miles of wire	182,102	191,949	9,847
Number of offices	6,759	7,252	493

Total number of messages sent in 1875, 17,966,479; number sent in 1876, 19,446,697. Increase, 1,480,218.

* * *

Telegraph Employes and the Western Union.

TO THE EDITOR OF THE OPERATOR:

Allow me to congratulate you on your happy editorial in THE OPERATOR of March 15th entitled "Telegraph Employes and the Western Union." There is no doubt but that you have struck the key note of the situation. And I am pleased to find that we have a journal which is both able and willing to expose those transparent poultices which the Western Union Company is always so ready to apply, to heal the wounds and sooth the ruffled feelings of its outraged employes. Identical interests, forsooth! What a colossal facial area it must require to attempt to force that down the throats of the men who since January, 1876, have, from their meagre salaries, contributed to swell the dividends of the company. Oh, no, Mr. Editor of the United Employers and Employes Journal, telegraphers can have no sympathy with the W. U. Co. in its efforts to crush by fair means or foul, its enterprising competitor. We have been all through that. With the entree of the great monopoly came that squeezing, grinding policy which has reduced the operator to the merest machine, and been the source of all our present degradation. And with the resumption of that monopoly who can say to what extent this policy may not be carried. And yet after all our experience you would have us believe that when the Company has all the power, it will deal more honestly with us than it has in the past. Of course the millennium may be near at hand, but we have no such positive evidence of it as the fact of the W. U. Co. attempting to be either generous or just toward its employes.

METO.

* * *

ALLAMISTAKEO.—On Saturday afternoon I sent a message addressed, To all Agents, Belleville to Kingston, about the cancelling of a train which was acknowledged by all stations except Tyendinaga. He, however, proved to have been on the *qui vive*, as calling me up a few minutes afterward, the following conversation ensued:

"Tyendinaga.—"I received that 23, and I want you to understand that I will not submit to be d—d by you. I shall write Mr. —— (supt). about this."

"Dispatcher.—"What are you going to write? about? What's wrong?"

Tyendinaga.—"You will know when you see my letter. Come down here and say it to my face if you dare."

Dispatcher.—"But what did I say?"

Tyendinaga.—"You said 'dam agents,' and I will not be d——d over the wire by you or any other dispatcher."

Tyendinaga was considerably surprised, and his anger very much appeased when informed that to operators of a little more experience there is a considerable difference between the words "To all agents" and "Dam agents." A TORONTO G. T. DISPATCHER.

Echoes From 197

Don't Morris Brick look sweet in his new office coat?

"Flora" Moffatt has gone into the Cable Room again.

Fred Rector has the regular Chattanooga wire for the present.

Mr. Pearse has been transferred to the New Orleans duplex.

Redmond F. Brien from St. John's, Newfoundland, arrived in the city last week.

Walter Richmond can make more noise for his age than any boy in New York.

Mr. A. H. Nelson has obtained a situation in the W. U. main office, one to eight a. m.

E. F. Welch has taken the Philadelphia Morse wire, *vice* G. W. Brownson resigned.

Mr. R. B. Lown has resigned. He intends going to Poughkeepsie to engage in other business.

The Lunch Room business has declined fifty per cent since Chief Bogart gave away his ticket.

Frank Rae sailed for California on Saturday. He has the best wishes of all the New York telegraphers.

Mr. T. H. Rielly has signified his intention of resigning from the Wire Club, because his remarks at the last meeting were incorrectly reported.

Fred Owen of 145 Broadway, was taken seriously ill with brain fever last week. He lies at the Chamber Street Hospital in a critical condition.

Joseph L. Edwards, printing operator from New York, was detailed to put in the new motor in Boston office, which he successfully accomplished.

Ed Kearny of the Cincinnati quad has made several sketches in the monochromatic style, which are really beautiful, and reflect credit upon him as an artist.

The handsome frescoed ceiling of the operating room is being taken down, owing to its being badly cracked. It is understood that the new ceiling will be plain white.

Mr. Bradt is anxious to join the wire club. He says he can send faster than Joe Wood, make a prettier copy than John Martin, and put on more airs than Weller on a ball night.

It is said that Senator Morton intends rewarding Returning Board Howlett for his political labors by procuring him a position in the navy. He would make a good figure head for a Revenue cutter.

Mr. Julien Soule, for several years past manager of Lake City, Fla., office, the repeating point of the Cuba cable, and who has temporarily exchanged places with night manager Zeublein of Philadelphia, was in New York on a visit last week.

Operator George S. Brownson, on the occasion of his leaving 197 was presented with a Russia leather pocket book, with his name neatly printed thereon, by Mr. W. C. Pearse, on behalf of some of the boys. The presentation was quite impromptu, otherwise something of more intrinsic value could easily have been procured, as "Bn" was a general favorite.

On Thursday, March 15th, the last combination instrument in use was tenderly lifted from its position on the Boston circuit to make way for a motor. Scalding tears trickled down the faces of Miller and Calvert. A procession consisting of four Western Union chief operators, the night manager and a rear guard consisting of Bob Morris, solemnly bore it to its last resting place. After a few timely remarks by Mr. Morris as to his ability to put up the new motor, if furnished with a diagram, the old printing machine was consigned to oblivion.

Mr. Frank B. Rae, an operator whose place it will be difficult to fill either in the affections of his brother telegraphers, or in his manifold duties at 197 Broadway, sailed with his family in the steamer Colon for San Francisco, on Saturday March 17th. If it is the policy of Mr. Gamble to gather about him men of culture and the highest professional standing, he has certainly made a wise selection in the present instance. In addition ,to his perfect knowledge of wires, instruments, etc., Mr. Rae is a splendid Morse, and a fair Painting operator. Genial, kind hearted and honorable in the extreme, Frank Rae is a man whose moral influence will be felt wherever he goes. His departure has caused a feeling of regret only relieved by the thought that his field of labor, though limited, is less open to competition, and that his exceptionable ability may meet that practical recognition too seldom granted to any member, however talented, of the telegraphic profession.

Dashes Here and There.

APROPOS to the time when, as Werner contends, the telephone shall have reduced our language to a few brief arbitrary signs, is the following newspaper clipping:

A UTICA (N. Y.) man demands, in the interest of young men and women who sit up together late every Sunday night, that this telephone invention be crushed out of existence or suppresed by injunction.

RECENT experiments at Antwerp for lighting up the river and harbor with electric light have been very successful. It is believed that this mode of lighting will now be generally adopted for the lighting up of large spaces.

THE lines of the Merchant's National Telegraph Company, extending from Pittsburgh through the oil regions, have been turned over to the Atlantic and Pacific Telegraph Company, the lease to the Western Union Company having expired.

When a man in Nevada receives a notice signed "601," telling him that he must quit that section, he understands that if he disobeys he will be punished by vigilance men. Seven thieving gamblers have just heeded such a command in Reno.

A TELEGRAPH line is now being constructed between Lake George and Chubb's Dock, a station on the shore of Lake Champlain, located on the line of the New York and Canada Railroad. The wires will be strung over the Dresden Mountains.

THE receipts of the Western Union Telegraph Company for 1876 were over $10,000,000, and the profits figure up $3, 437,650. 44. That is a nice tax the public pay for the use of a few old jugs of acid. Let's start a company bottling up air and sunshine. and peddle that out for the cubic foot.—*N. Y, Graphic.*

'TIS pleasant to know that amid life's sunshsne as in its darkness, when the stars are cloudless as when they have one by one hid behind the gathering gloom of clouds, that the Great Pilot is at the helm, and the war-ship of life, careening upon a thousand waves, is still steady on her course safe in his hands.—*J. D.Reid in "Lighting Flashes."*

A LAUGHABLE typographical error has been made in the posters announcing the telephone concerts in this city. In letters about twelve inches in length it speaks of "Prof. Eliza Gray's Telephone." Wonder what the audience will say when Elisha, and not Eliza, essays to explain the wonders of the harmonic system.

IMAGINE a sanctum, says the St. Louis *Journal*, provided with a telephone. When an exchange fiend drops in and begins to root among the papers he hears a small but distinct voice saying to him, "See here, you sassafras-colored snoozer, go to a reading room. Come now, bounce out; that whisky you are perfumed with is just awful. Hello, Barney, start up the Bogardus kicker—one—two." The fiend looks around at the silent and solemn editor scratching away, turns pale at the thoughts of sudden jim-jams and bolts.

A PECULIAR robbery occurred at Doddtown, N. J. the other day. An aged and wealthy couple named Jenkins received a telegram stating that their only daughter, living in Newark, was at the point of death, and they immediately took the cars for that city. On arriving at Newark they found that the telegram was bogus, and that the daughter was in perfect health, and on reaching home the next day, they found that their house had been entered during their absence, and $2,000 in money and silver, and $200 worth of clothing, carried off.

WHEN we can grasp a long sought object, be it wealth, honor, or position, the attainment of which has long dangled before our eyes, hundreds of imaginery obstaclee seem to intervene, dooming us to bitter disappointment. Like the intricacies of a dream, in which we ask ourselves is this merely visionary, or is it real? and in our dream we awake, and it is gone forever, leaving a shadowy imprint of tantalizing joy or unspeakable terror which lives in our memory for a day and is then filed away a blank leaf in the archives of our life.—*Ralph W. Pope in "Lightning Flashes."*

THE steady, monotonous click a clack of the sounders in the Western Union telegraph office was relieved, the other night, by a little incident. One of the operators, which his name was Bob Martin, was there alone, dealing out electricity, right and left, when in walked a dog. We are not prepared to say that it was a mad dog, but the lonely operator thought it was, and that answered the purpose just as well. There was a sudden change of base. The operator roosted on the highest desk in the office, and frothed at the mouth, if the dog didn't; while the brute gazed on him with a sort of uneasy expectancy depicted in his glaring eye. "Sd-Sd-Sd-Sd-Sd" stuttered the sounder, but the representative of "Sd" was up a tree, and somehow, under existing circumstances, he didn't care to come down. Enter a policeman who is earnestly entreated by the treed party to "put out that dog." The policeman reconnoitres the enemy, but the dog showing symptoms of anger if not of madness, the policeman valiantly takes refuge in flight. Why didn't they shoot him? Well, they didn't want to disturb the folks in the hotel up stairs. The result of the whole matter was, that the dog went out finally of his own accord, and was last seen sneaking up Harrison Avenue; and the dealer in "dunder and blitzen" has happily no expectation of hydrophobia, unless it can result from a first-class scare. *Springfield (Mass) Union.*

PERSONALS.

Charlie Andrus has accepted a position with the W. U. at Kansas City, Mo.

Mr. S. C. Scovert is operator and agent for the C. and P. R. R. at Altoment, Ill.

Mr. Thomas A. McClory is manager of the A. D. T. Co. at 693 West Madison Street, Chicago.

Mr. H. H. Neil operator at Peoria Junction has resigned, and been succeeded by Mr. Will Burns.

QUADRUPLEX repeaters have been placed on the Texas wire in the Kansas City Western Union office.

Mr. M. W. Connolly, the W. U. manager at Jacksonport, Ark., has left the business to become a lawyer.

Mr. A. A. Farmer, G T. R, Georgetown, Ont., will receive subscriptions for THE OPERATOR, "Lightning Flashes," etc.

Mr. Jacob Levin, of Atchison, Kansas, has been appointed manager at Sedalia, Mo., Messrs. Lucking and King are the night men.

T. F. O'Rourke has been appointed agent and operator for the V. and T. R. R. Co. at Empire, Nev., *vice* J. R. Parterfield, resigned.

Fitzpatrick formerly of the A. and P. Company at Gold Hill, has accepted a position in Carson City with E. B. Pirdey, A. and P. office; Tom Allen, an old timer, is also there, waiting for "something to turn up."

G. W. S. Hurd, recently of A. and P., New York, called at the Cleaveland office a few days ago, on his way to St. Louis, where he expects to remain with the W. U. for a few months.

Mr. William Hart train dispatcher G. T. R. Toronto, Ont., is agent for THE OPERATOR, "Oakum Pickings," "Lightning Flashes," etc., on the Grand Trunk Railway. Subscriptions and orders sent Mr. Hart will receive due attention.

Miss Kate Cornwall, who was for a long while employed by the Nev. and Northern Tel. Co. at Willow Springs, Nev., has returned from Europe, where she has been viewing the old home, taking in the Centennial on her return.

Mr. Robert Rattray who has worked for the Dominion Telegraph Company, Toronto, for the last year, has resigned to accept a similar position with the A. and P. at Chicago. Bob is a fine operator, and has the best wishes of all the boys.

Harry Stewart, long connected with the dispatcher's office at Wadsworth, Nev., as day operator, has resigned his position and accepted one in the office of the "Big Bonanza," Con Virginia Mining Co., at a salary of five dollars per day.

Will the author of "the card of thanks" to "Nuf Ced," signed "A. H. R." in THE OPERATOR of March 1st, be kind enough to send me his name and address? I am anxious to make his acquaintance. W. S. Mack, Lock Box 106, Akron, Ohio.

Mr. C. H. Birch, late manager at Tallahassee, Fla., is now deputy clerk, Duval Co., at Jacksonville; Mr. George Helms is his successor at Tallahassee; Mr. Gilbert D. Mills was appointed to a clerkship in the Interior Department at Washington on the first of March.

Mr. Charley Taylor, the even tempered, good natured night dispatcher of the Truckee division of the C. P. R. R. has resigned his position to the extreme regret of all the boys on the division, and takes charge of the military line from Cheyenne to the Black Hills. He thinks Uncle Sam beats all railroad monopolies to work for.

The following gentlemen have our thanks for favors in the way of clubs. J. G. Boyd, Hugo, Col. G. M. Hughes, Braddock, Pa. C. A. Scheffer, Elmira, N. Y. S. Friedlander, Hokah, Minn. W. H. Sparling, Chatham, Ont. Wm. J. Foy, St. Louis. Mo. G. F. Amadon, Fitchburg, Mass. C. Hollowwell, New Castle, Ind. J. W. Nemiah, Winstead, Conn. J. A. Fisher, Newton, Kansas. A. F. Stickney, Hopkinton, Kansas.

C. E. Banvard has been transferred from the night office at Blue Canon, Cal., and accepted the night office at Truckee, Cal. H. Martin takes the night office at Blue Canon, Cal., L. R. Shively has been transferred from Truckee, Cal., to the day office of train dispatcher at Wadsworth, Nev., J. S. Hunter of Philadelphia accepted a position as night dispatcher at Wadsworth, Nev., *vice* Chas. Taylor resigned.

C. C. C. AND I. R. R. NOTES.— The train dispatchers' office is at Delaware, O. Mr. E. A. Peck is train dispatcher, Mr. J. W. Dudley chief, ably assisted by Messrs. J. G. Rahn, and John Nagle, days, and E. E. Ellis nights. At Catawba, Mr. J. S. Liggett and E. A. Clapp waft the electric fluid; at Marysville S. Myers and Charles Hamilton; at Milford, Charles Worch and J. W. Shepper; at Mechanicsburg, D. F. Blue and A. K. Beeler; at Springfield, Johnny Cobey, J. A. Ridgley and C. C. Merkley; at Osborn, Lew Withrow and Joe Naden, and at Dayton, George Schenck and T. Wilson.

SOME OF THE C. B. AND Q. BOYS.—Mr. Charlie Lee, of the General Baggage Office, Chicago, is the agent for THE OPERATOR on the C. B. and Q. R. R., and a very popular and worthy gentleman. Mr. H. B. Patterson is operator for this company at Walnut, Ill., J. A. Rawles at Prophetstown, William Minkler at La Moille, W. C. Wilkinson at Riverside, C. E. Ingall at Streator, William McKee at Neponset, Jno. Tully at Kewanee, F. E. Grubb at Galva, A. Hallam at Wyanet. J. B. Smith at Avon, W. Everett at Gilson, L. O. Wood at Wyoming, E. P. Durrell, at Vermont, J. E. J. Lytle at Mendota, O. C. Whitcomb at Oneida, C. Nichols at Galesburg, Ed Pool at Burlington, Iowa, and H. N. Sykes at Lucas; Iowa.

BIRTHS.

March 7, to Mr. C. S. Wells, manager W. U. Tel office, Calvert, Texas, a son.

To Mr. Joseph Neath, operator at Schooley's Mts., N. J., a girl, 10½ pounds.

March 14, at Minden, La., to Mr. George English, manager W. U. Tel. office, a son.

March 14, to W. H. Stevens, of the Board of Trade, Buffalo, a daughter; third edition.

March 21, at Whitefield, N. H., to F. H. Gove, operator, Fitchburg, Mass., a daughter.

March 11, to G. R. Gray, agent and operator P. & E. R. R., Litchfield, Ky., a son. Ten pounds, first edition.

March 3, to Mr. Thomas F. Dordin, manager of the A. & P. Tel. office at Winnemucca, Nevada, a bouncing daughter. Volume 1, No. 1.

MARRIAGES.

McARTHUR—CRAIG.—At Georgetown, D. C., on the 22d inst., by the Rev. B. Peyton Brown, assisted by the Rev. Richard Norris, Clarence L. McArthur, of the W. U. main office, Washington, D. C., to Ella A., daughter of W. H. Craig, Esq., of Georgetown.

DEATHS.

March 11th, at St. Vincent's Hospital, this city, of consumption, Edward F. Wilson, night operator at 191 Broadway, aged twenty-two years and three months. Before his death Mr. Wilson requested Mr. Pete H. Flynn to kindly thank the operators in the New York City lines and others who had so willingly contributed to his comfort during his last illness. His bereaved mother and [illegible] their [illegible] grateful thanks for favors shown him.

Price by mail $1.50. **Price by mail $1.50.**

Lightning Flashes and Electric Dashes;

$1.50 **$1.50**

A VOLUME OF

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ALL THE PRINCIPAL WRITERS IN THE RANKS OF TELEGRAPHIC LITERATURE,

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First Class.
"By Kraut"
The Newly Appointed is "Invited to a Seat" With the Usual Ceremonies.
Anatomical Inspection Before Acceptance
No Admittance
"The Accepted"
NO TALKING
By Kraut
What d' yer say?
ye Telephonists of 1877.
Harmonious Internal Working

Above cuts and those on opposite page are from the new book, Lightning Flashes and Electric Dashes, just published. The space here will only permit us to give the first four of Mr. Calahan's famous Telephone Sketches, but these will give a general idea of what the complete set is.

Every Telegrapher wants a copy of Lightning Flashes. Although the expense of the work, on account of the size of the book, the page being fully three times the size of Oakum Pickings, and the very large number of engravings prepared especially for it, has been very great, we hope to dispose of a large number of books, and have therefore decided to put the price down to $1.50 a copy. From the following names of some of the "Star" contributors, it will readily be seen that Lightning Flashes and Electric Dashes will be decidedly the most entertaining and enjoyable Telegraphic book yet published.

Joseph Christie, "Werner,"
E. O. Chase, "Nuf Ced."
W. P. Phillips, "John Oakum,"
D. C. Shaw, "Oney Gagin."
T. C. Noble, Jr., "Chops."
G. W. Russell, "Ruddy."

Benson J. Lossing, LL.D., Author U. S. History and other Works.
J. A. Clippinger, Author "Pedagogues of Widows' Gulch,"
J. M. M., Author of "Was She Wrong?"
Charles Barnard, Editor "World's Work," *Scribner's Monthly*,
J. D. Reid, Secretary G. & S., ex-Superintendent, and ex-Editor,
Ralph W. Pope, Inspector G. & S., Telegraph Co. Geo. H. Bliss, Chicago, and many others.

The artists are Messrs. J. J. Calahan, New York, Joseph Christie, Phila., R. A. Empey, Hamilton, Ont., and others.

We will send Lightning Flashes, prepaid, to any address, on receipt of price, $1.50; Lightning Flashes and Oakum Pickings, $2.75; Lightning Flashes and The Operator one year, for same sum; or all three, $3.75.

To Agents we will sell the book for $1.25 a copy. Three copies must, however, be ordered at one time, to secure this reduced rate. Single copies will afterward be sent at same price. Get two of your friends, Telegraphers or outsiders, to join you, and order three copies at $3.75.

☞ To any one sending us orders for four copies of Lightning Flashes, at regular price, $1.50, we will send an extra copy free and postage prepaid. Send in orders as fast as received, and they will be placed to your credit, and can be added to at any time.

W. J. JOHNSTON, Publisher, *P. O. Box 3,332 New York.*

Consulting Electrician, Prof. James La Rissey, called not long since upon Mons. C. McCarty, Chief Engineer of Electromotive Force, at the latter's laboratory in the Main Office in this city. A learned discussion ensued in regard to the uses of "ile" in Callaud cells.—*Operator, Sept.* 15, 1874. Drawn by J. Christie.

Some of the Illustrations in "Lightning Flashes."

Among the full-page cartoon engravings, drawn and engraved especially for Lightning Flashes, we might mention Telegraphy, Ancient and Modern (double page); The Telephone (double page); The Manager is In and The Manager is Out (double page); Scene A.D. 1900; A Shocking Affair; Position Is Everything; The Telegrapher's Dream; Scenes on a Jersey Railroad; Lull of Business in the Ladies' Department; The Quadruplex; Discussion About Putting "Ile" in the Batteries; Scene in the W. U. Main Office (three pictures); A Deep, Dire, Dreadful Tragedy in Four Acts; Te–LEG–raphers, etc. Besides these there are numerous smaller illustrations explanatory of the reading matter, a large number of the articles containing from one to six illustrations. The portraits and short biographical sketches of several prominent contributors and other telegraphers, each making one full page, are added, so that the book literally overflows with illustrations.

The book is beautifully bound in FULL CLOTH, like Oakum Pickings, and from the accompanying names of the well-known contributors it will at once be seen that the work to telegraphers must prove "A THING OF BEAUTY AND A JOY FOREVER." No telegrapher can consider his library complete without a copy of Lightning Flashes; and as all the matter in it can be understood by persons not connected with telegraphy, it is hoped that the book will have a large sale among outsiders. Agents are wanted everywhere to introduce the book.

Lightning Flashes and Oakum Pickings.—We will send, prepaid, to any address, a copy of "Lightning Flashes" and a copy of "Oakum Pickings" on receipt of $2.75, or Lightning Flashes and The Operator one year for the same sum.

☞ To any one sending us orders for four copies of Lightning Flashes, at regular price, $1.50, we will send an extra copy free and postage prepaid. Send in orders as fast as received, and they will be placed to your credit, and can be added to at any time.

Remit by post-office order, draft, or registered letter.

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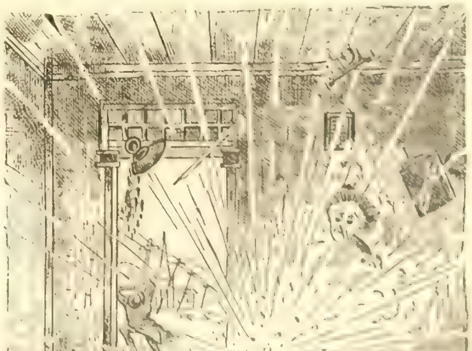
W. C. LONG, General Western Agent W. U. Tel. Co., Chicago, Ill.
J. M. HOGAN, Gen. N. W. Agent N. W. Tel. Co., Milwaukee, Wis.
E. SOMERVILLE, Gen. Pacific Coast Agent W. U. Tel. Co., San Francisco, Cal.
N. D. WEBSTER, Gen. Canadian Agent, M. Tel. Co., Toronto, Ont.

The Volcanograph, by Werner.—"Give them (the main office) another turn," urged the Doctor.

Sample of the Type in Lightning Flashes.

It takes the old man a long time, together with many a strong dose from the domestic store of applejack, to compose himself; but as he reaches over the table for the last piece of custard pie, he gives his eldest son Junius a terrific back-handed whack in the jaw in answer to an innocent request to elucidate the mysteries of the volcanograph.—Werner in the Volcanograph, "Lightning Flashes."

Such a burning stream of affection, solicitude, and sentiment flowed over that senseless iron thread, when not ruthlessly interrupted by common-place dispatches, that I often thought, when our words grew warmer than usual, that the wire might positively *melt*, and so cut the only link that bound us in love together! That link was over four hundred miles long, as you know, old man, and yet we seemed as near to each other as if 'twere only a clothes line! J. M. M., *Author of "Was She Wrong?" in* "Lightning Flashes."



The Volcanograph, by Werner.—But the volcanograph cut him short.

☞ *All Persons sending for* information or samples of articles advertised in our columns will confer a great favor by mentioning that they saw the Advertisement in

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[illegible] Operators. [illegible]

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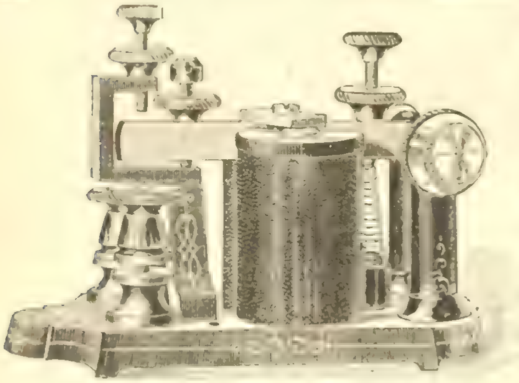

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Specialty outfit complete, consisting of Sounder,
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They can be used directly and will wear as long as any type-metal plates, but if a great number of impressions are wanted, duplicate

ELECTROTYPES AND STEREOTYPES

can be made from them the same as from wood-cuts.

They have a printing surface as smooth as glass, and the lines are engraved deeper than they are in hand-cut plates. Notwithstanding the *low prices* at which they can be furnished, they are very much superior to wood-cuts, and in some classes of work are rapidly taking the place of lithography.

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Among those who manifest their satisfaction with our work, by continued orders, we may mention: D. Appleton & Co., Scribner & Co., Frank Leslie, A. D. F. Randolph & Co., G. W. Carleton & Co., The American Tract Society, Robert Carter & Bros., Munn & Co., Pub. "Iron Age," Pub. "Illustrated Weekly," Pub. "Moore's Illustrated Weekly," and also a large part of the principal publishers and manufacturers throughout the country.

COPY.

Almost all kinds of Prints or Engravings from Wood, Stone, Copper and Steel may be reproduced directly. *The requisites are, clean, distinct black lines or stipple work, on white or only slightly tinted paper. All Photographs and Pencil Sketches must first be drawn in ink.* We keep a corps of artists constantly employed, trained to do this work in the best manner. We can make drawings from photographs or tin-types taken in the usual way. They may be of any size, but should, of course, show the object distinctly.

Drawings for our use, unless intended to be redrawn, should be on a *smooth white surface*, in *perfectly black* lines, and usually twice the dimensions each way of the desired plate.

Copy for facsimiles of handwriting should be in *perfectly black ink*, on *smooth white* paper, written with a full pen, and without use of blotting paper.

TIME.

While we can engrave a plate in a few hours that would occupy a wood-engraver a month, and often do so, yet with the large amount of work constantly on hand and promised, we cannot usually engage to fill an order for a single plate in less than from three to six days; larger orders will, of course, require longer time.

CHANGE OF SIZE.

In reproducing wood-cut prints, the size can often be considerably reduced, but if the reduction is too great, the lines become so fine and close together that they will not print well. Coarse wood-cuts, such as are generally used in Newspapers, may often be reduced to half their linear dimensions, but *fine* wood-cuts admit of but little reduction.

Most steel plate prints and lithographs will not admit of any reduction, and even when reproduced the same size in relief, require considerable care in printing.

All kinds of prints generally look bad when much enlarged, as the lines become very coarse and ragged on the edges, though we have sometimes made very effective cuts for posters and handbills in this way.

In all cases of enlargement and reduction the relative proportions remain the same.

It must not be forgotten, however, that by *redrawing*, prints of any kind can be enlarged or reduced to any desired size.

PROOFS.

We will, whenever desired, furnish tin-type proofs of drawings made by us, for examination and approval, or correction, before engraving.

A printed proof is sent with each plate when delivered, which may always be equaled or surpassed in actual work with proper usage.

PRICES.

It is impossible to give a scale of prices by the square inch for miscellaneous job-work, as sometimes a small cut two or three inches square may require as much work as another one a foot square. We can, however, give an average inch rate to newspaper publishers whose work runs uniformly about the same from week to week, especially when they furnish us with copy already prepared such as prints and pen-and-ink drawings.

In sending for estimates be careful to send us the copy we are to work from, with full particulars as to size and quantity, and remember that it is the same with engraving that it is with everything else; the price will vary greatly with the quality of work ordered.

Never, directly or indirectly, ask us to give *you* better prices than we give our other customers, as we try to treat all alike.

The great advantage of our method of engraving enables us to give better work at lower prices than can be given by any other method for the greater part of such work as would be given to wood-engravers, though in very small pieces of the poorer grades of work the advantage is not so great, and in very coarse work such as is usually engraved on wood, by the inch, our process gives us no advantage over the wood engraver.

To estimate properly upon any piece of work, we must understand just what is wanted. We guarantee all our work to be executed in the style agreed upon.

TERMS.

OUR TERMS are CASH ON DELIVERY, except by special agreement.

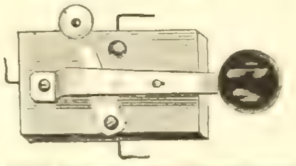
Orders from parties not known to us must be accompanied by an advance of at least half the price, or satisfactory City reference.

Goods sent by Express will be C. O. D. Where plates are small they may be sent by Mail upon receipt of price and postage. Remittances must be by draft on New-York or P. O. money order, payable to the order of Photo-Engraving Co., or by registered letter, *not by checks on local banks.*

We pledge ourselves to meet the reasonable demands of those who employ us. If in any case, we cannot do so, we will refund the money advanced.

Send Stamp for Illustrated Circular.

"THE BOSS."



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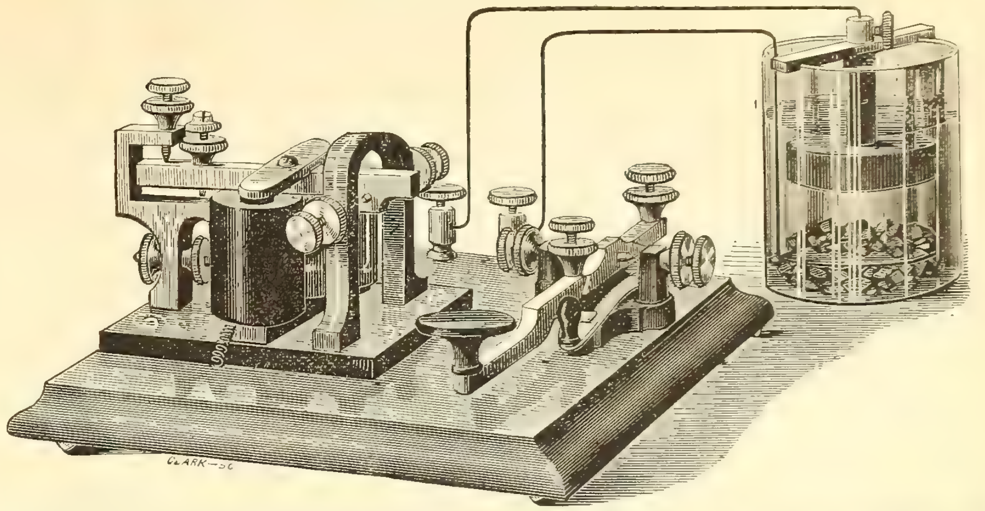

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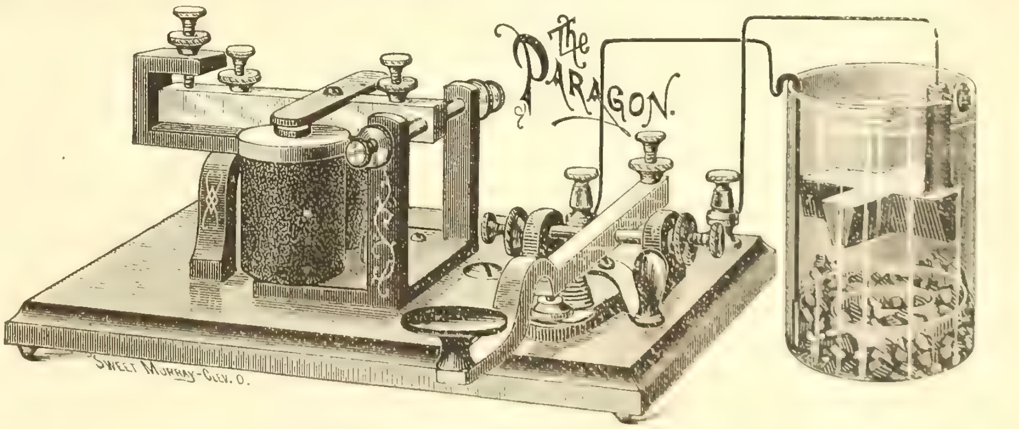
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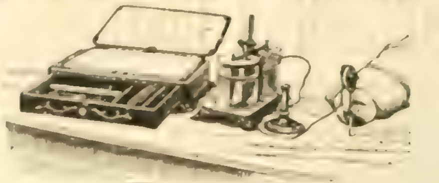

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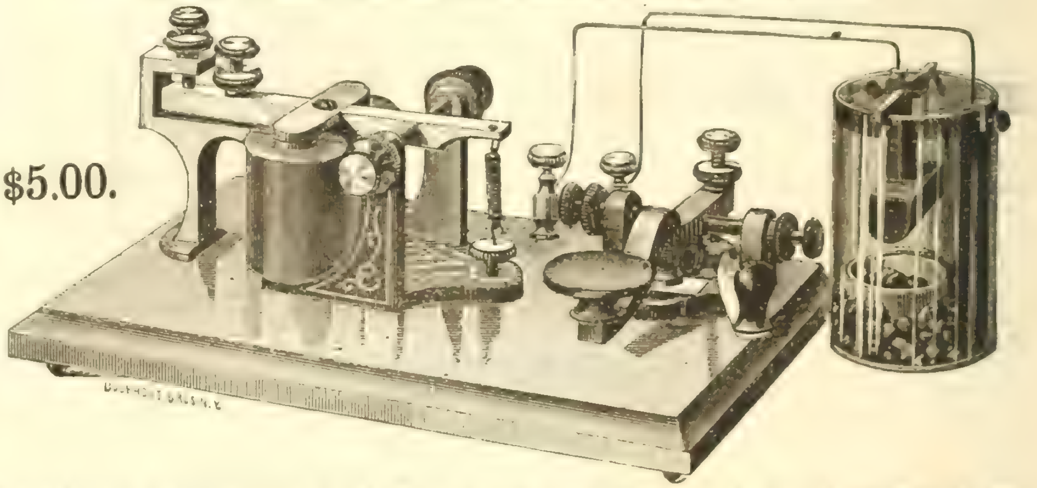

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The OPERATOR

A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

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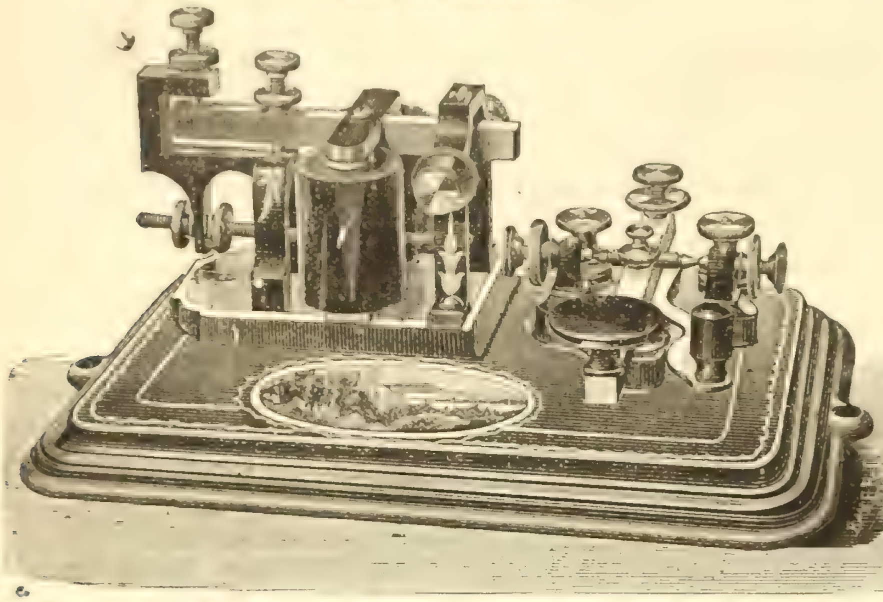

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THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

April 15th, 1877.

Volume VII. **Whole No. 76.**

Bert's Discontent.

All day he'd worked, with might and main,
With his ready pen, and readier brain;
The press had been heavy, so heavy that he,
Bert Deane, was tired, as tired could be.

And he longed, as he wended his homeward way,
For some other employment, both pleasant and gay;
And much regretted the unlucky decree,
That made him dependent on sounder and key.

He retired to rest with a weary mind,
Hoping in sleep some balm to find;
But the hours were wee, when slumber came,
To relieve his tired and drooping frame.

T'was morning again, could it be true?
Another day's work for Bertie to do.
With scarcely an hour of sleep or repose,
To strengthen his nature, and lighten his woes.

He reaches the office, he opens the door,'
Is struck with amazement, terror, and awe;
Here stand the Chief, and his friends of the wire,
All of them grieving, or venting their ire.

The key and the sounder, inseparable pair,
Were missing forever from the tables so bare.
Instead of the click came a sigh and a moan,
Rumbling along from the new telephone.

Then he turns to his Chief for words of cheer,
But from this friend there were none to hear;
Their words were few, and these were sad—
For 'twas clear to all that the case was bad.

Now healthy lungs were only needed,
Skill and brains were superseded.
All kinds of men can do this work,
From the "Heathen Chinee," to the "Infidel Turk."

Bertie thought of his wife, and children dear,
With many a pang, and many a fear;
And remembered now, with humble confession,
His sinful desire for some other profession.

He realized, too, that times were bad,
And lucrative places not to be had.
And thus his fears continued to grow,
Till he cried aloud in his anguish and woe.

* * * * * *

"Come, Bertie, you'll be certainly late,
The clock in the steeple has just struck eight;
Till the very last minute I've let you rest,
You were sleeping so soundly, I thought it best."—

"Then 'twas only a dream," was all he said,
While joy and relief his face o'erspread;
And then and there, Bert Deane confessed,
That his lot in life was happy and blest.

NED KENT.

Our Night Car.

BY WERNER.

There is a large class of disdainful and luxurious aristocrats in this world who pay so little attention to the manner in which they are served by we poor mortals, that they imagine that every man who works after nightfall is necessarily a "watchman" of some kind. They do not, it is true, devote much thought to the matter, but on general reasoning they become possessed of the "ide yah," you know, that all the professional loafing necessary to make your employers happy is performed during the days and that any solitary job which necessitates a man', absence from home during the night must, perforce, be in the nature of keeping a watchful eye on the piles of money coined and stowed away in the broad light of heaven during seasonable hours. This class of persons, together with the professional day men, have much to learn of the vast and varied amount of work which is done by telegraphers at night, and some of the thankless duties entailed therewith which are unknown to the freshly polished and intellectual day man. The latter gentleman may form some idea of the amount of labor well and faithfully performed by the night man by looking at the number sheets next morning, or by reading the "specials" as they appear column after column in the morning paper which he invariably borrows; but he can never know of the side scenes—of the drivelling lunatics and rampant madmen who, in large cities, wander about the streets at night, and who are attracted into the office, like moths, by the lights in your window. At one time it is "Old Bradford" who drops in toward midnight merely to give you a striking illustration of his dramatic attitude when the Judge last sentenced him to the lunatic asylum; at another time it is a forlorn and boosy outcast, calling in on general principles — dismal and drenched, with "Led Astray" painted on the back of his coat (an explanation of which he is in blissful ignorance); still again it is the political fiend, mad from too much cipher message, who brings you forty foolscap sheets of bad manuscript which he wants telegraphed at once to the Secretary of War; and the occasions are by no means infrequent when your visitor betrays a lurking curiosity and conveys to you a general impression painfully expressive of the slung-shot, the bludgeon, and the pistol. Clubbing these old clowns out of the office, however, is a very small item in the extra work of a night man for which he never draws any extra pay.

It is in going home, about day-break, freezing in the night car, where you pay double fare for half accommodation, that the night man stores up an experience which will be forever a dark mystery to the professional quacks and botches who cobble up the public business and cook the company's accounts by day, and ride home in luxurious cars in the evening. Everbody knows that when a locomotive has collided with a day car, riddled it through the side with the cow-catcher, and left its head-light and a pair of decayed elk horns sticking in the roof, it would be against any general superintendent's ideas of economy to have it repaired. They simply transfer the wrecked conveyance to the night line, and the extra elk horns in the roof make an excellent hat-rack, while such foreign substances as broken cow-catchers and greasy head-lights afford cheap ornamentation, as well as avoiding the expense of repairing the vehicle. And so when great holes have been worn in the flooring, and some of the passengers fall through, their feet are on the pavement, but the major part of their bodies are in the car. They have to run like fury to keep up with their fellow passengers who, where the floor is solid, are comfortably sitting beside them. As a general thing a man would object to paying full fare for the privilege of running all the way home with the very thin delusion of being inside the car; but, since the pace is rarely a forced one, he falls to reflecting on what a noble work he is engaged in—saving a gigantic corporation the price of a new floor. It is only once in a while, when the horses, upon a sudden recollection of better days, make a spurt and "force" the running, as it were, that the breathless passenger will get mad and attempt to crawl up on the solid part of the floor where there is not standing room for another man. It is a standing rule of economy at the manufacturies—they are all alike—that nothing at all shall be wasted. Wild extravagance and dire necessity occasionally compel the frugal officials to build new cars; and wheels for new day cars, cast in defective molds by cheap workmen—wheels comprising octagon and oval shapes are reserved for the night line. No wheel on a night car was ever known to be possitively round, or if one that had once been round is taken from a day car for night use, by some spendthrift of a roadmaster, it is one of those technically known as a "flat wheel."

Frank drives our night car—Frank Myers. We call him "the two forty five," that being his starting time. But like a first class operator he is always late, though he tries to drive very fast. All the night telegraphers entertain a kind of fellow feeling for Frank, for, besides being a robust, cheerful, good, honest fellow, who never knocked down a penny in his life, he is a "night man"—not a vassal, but a peer—just as thoroughly as we are, and we are all classed under the generic title of "owls"—probably from the day men's keen appreciation of our superior wisdom.

Frank, although rarely demonstrative, shows himself to best advagtage when, holding his lines well in hand,he is presiding with judicial dignity and undisputed horsemanship over what is known to his profession as a "standing load" of passengers (which includes those who are running, owing to their feet protruding through the floor). It must be borne in mind that Philadelphia night cars, for economy's sake, carry no conductors, so that a standing load is very satisfactory to Frank, as it fills his patent Slawson box with cash.

Although a very muscular man, Frank is generally disposed to be urbane, as the general run of his passengers—newspaper men, telegraph men, and benighted tipplers—are usually very feeble, very tired, or very crestfallen. No tempest can ruffle his demeanor. No winter's snows, nor midsummer night's heat, nor rain, nor hail pelting him in the bronzed face can change the official bearing of Frank. Only when, where there is a double track, he is going up with a standing load and meets a plug of a driver coming down with one passenger does a contemptuous smile play upon his lips as he drives triumphantly past, and marks the dissimulating *nonchalance* with which the downward bound driver strives to whistle gayly in a vain endeavor to display his total unconcern and supreme indifference.

An episode like this will "draw him out." Holding his lines with one hand, his two emaciated, wheezy, and rheumatic steeds jogging on in chronic despair, he makes excited gesticulations with the other as he relates how, in his golden youth, he drove the Liberty Engine, and how he invariably secured the fire plug nearest the conflagration, although he would achieve that enviable position only by furiously driving for a mile on three wheels, owing to the base machinations of the Reliance Hook and Ladder that purposely run into him. He refers with much pathos to the "mettle" of the two old rips now drawing his car. When one of them lies down to enjoy an extra sound sleep, which is often, he excuses the animal in the most soothing terms to the irate passengers. He will insist that the mettle is there, and that they are unmatchable when "in trim;" but the misfortune is manifest that they never happen to be in trim at one and the same time. When his "chestnut colt"—which can not be less than seventy-five years old—comes out of the stable professedly full of steam and speed, its mate, the "bay mare," is disposed to lie down and reflect on life in general. On another night, when the bay mare—which is worth about two dollars, delivered at the pork packing establishment—is feeling skittish, the chestnut colt will be laboring with the rheumatism. But these crushing facts never melt Frank's faith in the unfortunate quadrupeds. He will keep up the thread of a political argument in the most adroit manner, without a break, even when the jolting of the caboose tumbles him back among the passengers, or when the unexpected stoppage of his cattle—'twere base flattery to call them horses—pitches him headlong over the dash board.

While engaged in these multifarious duties, Frank can drive a very Shylock's bargain with a fish-woman who proposes to carry her market stall, two baskets of questionable herrings, and her corpulent self all for one fare. Of course, there are times—state occasions—when Frank's temper is ruffled, for instance, when one of the city authorities, a belated chief operator, or some other pompous individual enters the car, dumps a number of pennies into the Slawson box on top of a fare just previously deposited, and then volunteers to wage mortal combat with Frank rather than admit that he only put nine cents in the box. He would be a base slave who would pay tribute of a single extra cent to a grasping corporation, while on a night car even behind two alleged fiery steeds, would be but a desert waste to Frank if he were bulldozed into carrying passengers for nine cents. When factious opposition has done its worst, the passengers all stand on the seats to give them room; Frank coolly hands his reins to me, and it is only after they have clinched and rolled each other in the straw on the floor, with the regular threats to "terribly thundering swell the gale," that the refractory city authority, belated chief operator, or other pompous individual bows to the great corporation and the god of war and puts another cent in the box.

When the car stops to pick up a fresh passenger all eyes are, as everybody knows, turned toward the door to see who it is. If the new-comer chances to be intoxicated, all the other benighted men in the car consider it incumbent upon themselves to fall down in the straw or to jab their elbows through the window glass, merely to [illegible] [illegible] to get up and [illegible] the unfortunate stranger. They all shake hands with him cordially, from pure human sympathy. His zig-zag progress from the rear door to the Slawson box is turned into one vast tumultuous ovation; and, while fumbling in his pockets for the fare, he is generously bolstered up with an improvised scaffold—a very forest of walking canes, umbrellas, and other handy props. He is then expected to tread on four men's toes on his way to a proffered seat, where he must deliver a kind of inaugural address, lean over on somebody more stupid than himself, and go to sleep.

Then on a winter night, when the drifting snow nearly blinds Frank, they make all kinds of riotous demonstrations, and get him so worried that in going round a sharp curve he gets off the track. Now, if the large-hearted passengers would only let him alone he could soon get on again all right, but with that unbounded liberality characteristic of inebriated Philadelphians, they emerge with the avowed purpose of lifting the car upon the track again. A very simple calculation will demonstrate that, under ordinary circumstances, forty men can lift a street car, and if they are sober and display a certain degree of unanimity they can carry the same from the gutter and deposit it squarely on the track without much trouble. But, while forty drunken men are quite capable of lifting a car—including a man asleep and a fat woman inside, and the driver on the dash-board—they are, owing to a lack of unanimity, only able to stagger about in the snow, objectless, but enthusiastic and undaunted, embellishing the performance with fiendish screams of encouragement to each other, frantically yelling to "hold her up," "away she goes," etc. Frank gets too mad for anything, and threatens to run a-muck among the fuming crowd, which, after describing numerous eccentric circles with its unnatural load, deposits the same, back end foremost, nearer to the gutter, and suddenly melts into a snow bank. In spite of Frank's vehement remonstrances they come at it once more, shake hands all round, each congratulating his neighbor on his wonderful prowess, and they sieze it again. Then ensues a terrific racket; the three-ton car is again hoisted into the air, the same pushing and staggering and shouting recommences, Frank's animals rear with affright, the rattling of lamps and window glass awakens the man inside who has been dreaming that he was on a French steamship in a storm. The willing throng, amid a tremendous noise, wander all over the street with their immense load until by a stroke of good luck they let it drop in the proper place on the track. Then comes the pantomine. Frank starts his team at a gallop, and knowing that a second stoppage would stick him again in the snow, he lashes the beasts into a furious pace. Of course, this proceeding obliges his volunteer aids to mount the car while it is in rapid motion; and it is no easy matter for forty inebriated men to board a rapidly moving car all at one time. By dint of wonderful feats of agility, however, and amid Indianlike whooping and yelling, about twenty-two of them get in through the windows or over the dash-board, while the remaining eighteen go home afoot or fall asleep in the snow.

The lucky ones who have thus got aboard unsettled generally slumber peacefully after their self-imposed task; but up town, when Frank wakes them up and disembarks them in squads, the fun recommences. Men who on entering the car were utter strangers to each other congregate under the nearest lamp-post, issue to each other unlimited invitations to dine, and rend the air with fervid protestations of undying friendship. And as I nestle up in a vacant corner for a quiet nap I hear our late passengers in the distance extolling, in supposed musical meterthe natural and acquired abilities of that admirable genius, 'Muldoon, the solid man.'

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ANOTHER TELEGRAPH INSTITUTE SWINDLE.—Joseph J. Hellchen, 19 years old, who has been conducting a sort of telegraph institute at No. 250 Washington Street, Boston, was arrested last week by Detective Hines and arraigned in the Municipal Court charged with obtaining money under false pretenses. It is said that he has received some 50 or 60 pupils, who have paid him in advance for tuition, he promising to teach them telegraphy and secure them positions with the Atlantic and Pacific Telegraph Company. He has, it is reported told his scholars that he was conducting the school in the interest of the telegraph company named, but when the scholars finished their course of instruction, they found that the company knew nothing about Mr. Hellchen

Into the Jaws of Death.

A TELEGRAPH OPERATOR'S STORY

BY VAN.

"I meekly resolved to try. Taking up a pencil I managed to count the words and scrawl the check on the message with some difficulty. I was going to remark, from force of habit, that it should be written on a message blank under the conditions, but bethought myself in time.

"'Stop—what is that?' said the chief, pointing to the check.

"'The number of words and the amount paid,' I answered.

"'Is this necessary?' he asked of the man to whom he had spoken before.

"'Yes, sir. It is all right. They call it the check, and put it on every message.'

"'Very well then, go ahead. This man is an operator; he will watch you closely, and at the first sign of treachery I will put a bullet through your head. Smith, stand out of range, or you may get a taste of it, too.'

"I sat down at the table--he pushing the chair closer. Opening the key I commenced calling 'R.' I again felt the cold barrel of the revolver on my forehead, and it made me so nervous that I could hardly manipulate the key. 'R' answered.

"'That is good,' said the man addressed as Smith, who was the operator.

"'Send slow. I can't read fast writing,' he added. I proceeded very slowly, and Smith pronounced each word as I made it. The leader glanced alternately at Smith and myself uneasily. It was evident that this was the crisis of their bold conspiracy. 'R' broke me in the middle of the message, wanting to know why the deuce I sent so slowly. I closed the key and took my hand away nervously.

"'What did he say,' demanded the leader.

"'He wanted to know why I did not send faster,' I said.

"'Tell him you have a sore finger,' said Smith. I spelt this lie out slowly, Smith reading it aloud, then went on and finished the message. 'R' gave a sharp and distinct 'O K,' which the renegade operator read aloud. The leader gave a sigh of relief, which I promptly echoed as he removed the pistol barrel from my head. He then unlocked one of the handcuffs, removed it, placed my hands behind my back and reclasped the ring around my wrist, thus rendering me perfectly helpless.

"There was nothing to be done now except to wait. The men disposed themselves on the chairs around the room, the leader still guarding me, revolver in hand.

"As I thought over the events of the last half hour I was filled with rage at the dastardly deed I had been compelled to commit. This money, which would now fall into the hands of these miscreants, was the property of honest farmers, widows, and orphans. And I had assisted to rob them! Better far to have sacrificed my life, If unharmed, how could I ever hold up my head again? Oh, that I had refused to be their tool! Was there no way to undo what I had done?

"Stop! *The key under the table!* Why had I not thought of it before? I opened it with my foot and made a few dots.

"'What is that?' said the leader.

"'Only some one practicing,' I answered, readily. He looked at Smith, who nodded.

"I called 'R' rapidly.

"'What did he say then?'

"'Pacticing the letter 'C,' sir,' I answered, glibly. 'Do you wish me to read aloud all that passes over the wire?'

"'No, it is not necessary,' said the chief.

"'I can read most of it,' said Smith, giving me a penetrative glance.

"I had my own reasons for doubting this statement. 'R' answered. I said, writing as rapidly as I could under the circumstances;

"'Has that message been delivered yet?'

"Yes—long ago.'

"'Then go after it and stop it. *That bullion must not be sent to-night.*'

"His key opened and remained so for nearly five minutes; then it it closed, and he said:

"'All right—the bullion will not go. What is the matter?'

"The matter is that this office is full of armed highwaymen. I was forced to send that message with a loaded revolver at my forehead.'

"'Good Heavens! Wait a minute.'

"I turned and met the eye of the robber chief. I could not help smiling sarcastically.

"He was on his feet in an instant.

"'By G—d,' he said, 'if you have played us any trick, young fellow, you will pay for it with your life.'

"'He has not said a word,' remarked Smith.

"'It is well for him,' said the leader. 'If that bullion arrives all right you will be released uninjured. If it fails to come, or if there is a sign of treachery, your corpse will be found on the floor to-morrow morning with your brains spattered on that wall.' I shuddered at this picture, which was beginning to loom up as a black reality before me.

"'The chief of police is here,' ticked out the sounder, 'and wants to know how you are situated.'

"'My hands are handcuffed behind me, and a man sits at my side with a loaded and cocked revolver,' I answered.

"'Thunder! Then how can you send?'

"'I am sending with my foot on a concealed key under the table, which was rigged up to play a joke on Mason.'

"'What can be done to save you?'

"'Nothing; but capture these robbers if possible. When does the train leave?'

"'In ten minutes.'

"'Then hold it. There are eight heavily armed burglars here. Better have twenty-five or thirty well armed men on the train. Let it stop just above, on the curve, and have them walk down and surround the station.'

"'R's' key opened a moment, then he said: 'It will be done. What will they do to you?'

"'I am doomed—will probably be shot the very first thing. But some one will swing for it.'

"'Good God!' said 'R.' 'Is there no help?'

"'No—none. I would like to have you bid Mr. —— (the Superintendent) good-by for me. Tell him I had resolved to live a better life. And tell Mason in the morning of the trick I played on him.'

"'I will—I will. Is there nothing else?'

"'No. I had better stop now or I may arouse suspicion. Good-bye.'

"'What is all this about?' demanded the leader of the highwaymen.

"'A couple of students practicing,' I said wearily.

"A deep silence followed, broken at last by the sounder ticking out: 'The train has just left with twenty-eight policemen and citizens aboard.'

"'O K,' I answered.

"It would make the run in forty or forty-five minutes.

"A distant church bell chimed out eleven o'clock. Where would I be at twelve?

"The time wore heavily away. I reviewed my past life. So far as I knew I had never harmed any one. Surely the manner of my death would atone for some at least of my sins. Whatever was before me I was prepared for.

"I had not a relative living. No one, excepting, perhaps, Mason, would mourn me. Well perhaps it was best so.

"'The train is due in ten minutes,' said Smith.

"Just at that moment I caught a sound which escaped the less practiced ears of my companions. The train had arrived and stopped at the curve!

"My blood coursed like wild-fire through my veins; my heart thumped against my side as though it would force its way out. Every nerve was alive with anticipation.

"It came at last. Both doors of the station were burst in with a tremendous crash—a wild rush was made for the inside office—a loud voice exclaimed:

"'Surrender, in the name of the law!'

"Betrayed!' shouted the leader. He placed the barrel of the revolver to my ear—the hammer fell with a dull thud. It had missed fire! With a curse he raised it in the air and brought it down upon my head—a bright flash passed before my eyes, the room sank away from me, and all was oblivious.

* * * * * * * *

"'I think he looks a little better, Dr. Thorne,' said a sweet voice. I opened my eyes.

"'Where am I?' I said. My voice was feeble and weak.

"'You must not talk. You are in the hands of friends, and all is well.'

"I soon found that I was in the house of the president of the bank, and that the young lady was his daughter, Miss Marion C—.

"Nursed by such hands my recovery was rapid. When able to get around I was provided with a clerkship in the bank, whence I have risen to my present position.

"The eight highwaymen were all captured, tried, and sentenced to various terms in the State prison. The ringleader received a life sentence, and is there still. We never found out how they obtained intelligence of the proposed hipment of the bullion.

"I do not consider that I did anything extraordinary, and I think almost any other operator would have done the same.

"Miss C—? Oh, she is Mrs. Erhardt now.

"Well, there comes the train, and I must bid you good-night."

I clasped his hand with a firm grip. He was the first HERO I had ever met.

"That was a noble deed of Erhardt's," I observed to Mason, now a railroad superintendent, as I met him the next morning.

"Yes; did you get him to tell you about it? He does not usually like to speak of it. I consider him the bravest man I ever heard of."

Which were my own sentiments exactly.

[THE END.]

Ruddy on a Visit to Hartford, Conn.

Did you ever, gentle reader, spend a day in Hartford? If not, take my advice, cultivate the acquaintance of the telegraphers there, and visit the city at once. If you can find, within a circuit of a thousand miles, a more congenial and hospitable crowd of boys than the employés of both the A. and P. and W. U. offices of that city, you may safely conclude that you have quit these terrestrial domains and are securely dwelling in Paradise.

Accompanied by Jim Mahan, second press man of Norwich, Conn., I went to Hartford on Saturday, March 24th, in acceptance of an invitation to go to the city and meet others of the profession. We were met at the depot by the noble Glyddon, whom we found temporarily working at one of the depot offices in the absence of the lady operator.

Escorting us to the office, our worthy guide introduced us to Lounsbury, of the A. and P., Hempstead, Wheaton, Boyle, Nolan, Walsh, Goodrich, Farrell, and Jackson, of the Western Union, while over in a distant corner stood Rosso, of New Haven, whose gracefully obese form evoked our admiration as we clasped his hand in introduction.

Will Hendricks, of New Haven, and Sawyer, of Waterbury, were expected by the 9:30 train. Accompanied by Hempstead we walked down to the depot to meet them. Before starting, however, we were treated to some of Wheaton's admirable puns. Wheaton is immense in this line, his specialty being puns on names. There's a standing offer of a pony sounder to any one who will produce his equal, which shows the confidence the boys in Hartford and Worcester have in his punning abilities. Grasping Mahan warmly by the hand, Wheaton said, "Mahansome friend, I'm pleased to meet you." To Russell he remarked, "I thought I heard a *rustle* as you came in." To Sawyer, "I think I saw yer before." And referring to Boyle, he remarked, "Generally speaking, boils are unpleasant things to have around you, but our friend here is a source of pleasure wherever you find him."

Evening was well advanced when we started for the depot, and, as we proceeded along, the police of Hartford, with whom the lads seemed peculiarly intimate, made no objections as we sang several soul-stirring glees. Hendricks and Sawyer put in an appearance promptly at 9:30 P. M. As the newcomers were vocalists, it is needless to say that our return to the office was characterized by increased choruses, and as the silvery tenor of Rosso blended sweetly with the profound bass of Hempstead, both being sustained by a chorus of eight voices in that gem of vocalism, "Good Night, Ladies," the air of Hartford seemed alive with angelic strains. Puritanical citizens raised windows, bootblacks paused in their labors, pretty hotel waitresses came to the doors in white bibs, policemen, spell-bound, let fall their clubs, horse-car jackasses stood still in the track thinking they heard the braying of their kin, and indeed every one seemed held by some strange and weird fascination. Realizing that a continuance of our songs might tend to prostrate the energies of the enterprising sons of Hartford, we suddenly ceased.

Note the result: Animation was instantly quickened, bootblacks resumed their tireless stroke, pretty waitresses flew back to their dishes, policemen picked up their clubs and continued their patrol, Puritanical citizens pulled down the blinds, and jackasses proceeded with the horse-cars. We attended the "Varieties," one of the permanent institutions of Hartford, where we saw a very interesting entertainment, and, returning to the office, adjourned to the hotel next door, where an excellent supper awaited us.

Around the festive board the best of cheer prevailed. Songs by several of the party were a genial feature. "Larboard Watch, Ahoy," by Messrs. Sawyer and Russell; "My Grandfather's Clock," by Wheaton; "Hold the Fort," by Rosso, and other excellent specimens of solo and duet vocalism, together with an endless variety of choruses by the entire party, occasional bits of humor and conversational pleasantries, all combined to make the two hours thus spent pass away unnoticed. The party then in good spirits retired for the night.

On the following day we were taken around the city, after having been sumptuously entertained at the residences of Messrs. Lounsbury, Hempstead, Glyddon and Wheaton. The various points of interest with which the city abounds underwent an inspection by all of the guests.

We regretted our inability to meet the ladies of Hartford, also Messrs. Cook, Nash and Kenyon, yet, notwithstanding this omission, our cup of pleasure was brimful, and as we left Hartford it was with a high and grateful appreciation of the uninterrupted pleasures which our friends had afforded us, and with a fond hope of an opportunity to reciprocate at some future day. RUDDY.

Another Telegraph College Swindle.

The Minneapolis *Pioneer Press* gives an interesting account of the doings of one Howser, in connection with a plug factory in that city.

About the 25th of January last a genteel looking young man, with an aristocratic style of carpet bag, arrived in town and put up at the Commercial Hotel, where he registered as G. W. Howsèr, of Chicago. He rented two rooms in Winship's block, at once, paying $15 per month in advance, and the nature of his business was immediately made known by advertisements in the daily papers, of which the following is a copy:

"Wanted—By Morse District Telegraph Company, ladies and gentlemen to learn telegraphing, to work our local lines. School for instruction now open, Room No. 8, Winship block, Minneapolis."

The advertisement brought forth fruit an hundred fold, and in due time this genteel Howser had secured a class of about twenty young ladies and getlemen, two-thirds of the number being ladies. His terms were $15.00, paid in advance, for an unlimited course of instruction. There was nothing small about Howser. He proposed to drill his pupils till they were masters of the art of telegraphy, and for this purpose set up a number of old telegraphic instruments in the room, upon which they were enabled to practice. More than that, he guaranteed each and every pupil, upon the completion of his or her course, a situation on the "local lines" of the "Morse District Telegraph Company," at a salary of from $30 to $50 per month, pledging most of them a place in Minneapolis. The students telegraphed across the room at each other very industriously, and concluded that it wasn't much of a trick to learn the business after all, and Howser really seemed to be a sort of public benefactor. But at last one young man seemed to have put on his thinking cap, and inquired of himself how in the world such a man as Howser was going to establish District telegraph lines enough to give the entire class $30 to $50 per month, in their own city. The more he thought the matter over the farther he was from understanding it, and finally on Thursday last he was led to express his suspicions to Mayor Ames, and ask if there was not some process by which this genteel manipulator of lightning might be persuaded to remain in town and fulfill his agreements, in case he should attempt to do otherwise. Overhearing this conversation, the *Pioneer* reporter on Friday morning published the following innocent little paragraph:

"There are rumors of a swindling 'telegraphing scheme,' but they are not of such a character as to justify publication up to the present time." And do you know, it is asserted that when a friend of Howser's discovered that innocent little paragraph, on Friday morning, and read it to that lightning calculator, he is said to have remarked: "that means me!" and was so indignant over it that instead of visiting the newspaper office with pistols and coffee for two, he just slid out without a word of farewell to his class, and took the train for St Paul. During Friday afternoon he didn't teach his class. They taught themselves, and wondered what had become of Howser! They are yet filled with the same inquiry, to which there is no satisfactory response—that is, no response worth $15 each to them. His agreement with his pupils was purely verbal. They understood that the city was to be divided up into districts, with an office and operator in every district, and it is judged from expressions among them that the good natured Howser, in the generosity of his heart promised to construct a regular cobweb of telegraphic wires all over the city and country, for the especial benefit of his class. He said it wasn't worth while to put the agreement in writing, as it was all on one side, or the benefits were. They begin to think so, too. Last week the class began to grow anxious—for instruction or $15. Howser was not visible to the naked eye. But S. E. Kirby, who has rooms in the same block, came in with a postal card and a letter from the wonderful man, mailed at St.Paul and addressed to him. On the postal card he instructed Kirby to take charge of the rooms during his absence—he would be back the first of the week, but the amateur telegraph operator relieved the gentle Kirby of that responsibility, assuring him that they proposed to "hold the fort" until further notice. They had paid for instruction in that room, and didn't porpose to be locked out of it by a man like him, who had neither legal right to the keys, or any knowledge of their favorite art—telegraphy! Kirby didn't get the keys. It was ascertained subsequently that in the letter to Kirby, Howser wrote that he should be detained in St. Paul for a few days. He was "going to organize a class there—ought to have stopped there in the first place! There are too many soreheads in Minneapolis!" so said Howser. He added that he would send up a teacher to take charge of the class, on Monday, and do as he had agreed by them. Perhaps he will. Kirby went to St. Paul to see Howser. So did an able-bodied member of the class, who reports that Howser hadn't reported at any of the hotels there. He was owing only a few days board at the Commercial when he left. He had no baggage, save a carpet-bag, which was stored in his "college rooms." The class, who endeavor to feel that Howser will come back again, are not at all sure of it, and when that deserted carpet-bag tumbled open last week, and exhibited nothing but a pair of dirty drawers and old suspenders, they concluded to take an account of stock, to ascertain what was in the "College" (beside the students), to hasten Howser's return. The schedule is as follows:

Ten old insruments, worth $3 each.
One old table, worth 25 cents.
Five new stands, worth $1.50 each.
One cotton carpet, worth $5.00.
One stove, worth $2.50.
Fifteen hard bottom chairs, worth 50 cents each.

The more they think of it, the more they are satisfied that Howser will certainly come back. They hold possession of the College, and are in hourly expectation of receiving a telegram from Howser, over his "local lines," inclosing checks of from "$30 to $50 each." Of course Howser will be back. Everything points toward his early return. But allow him time to organize his lightning in other towns.

A Ludicrous Mistake.

About a week ago Mr. Kosciusko H. Koselowski, a reporter attached to the Brooklyn *Freie Presse*, was directed by the city editor of the paper to attend the investigation into the condition of the insane at the Flatbush Asylum. Mr. Koselowski went to Flatbush and found that the investigation did not take place until the afternoon, which would be too late, the *Freie Presse* being an evening paper. Wishing to inform the city editor of this fact, the reporter went to the almshouse at Flatbush and telegraphed a request to police headquarters that a man be sent to infoam the *Freie Presse* that he was at the lunatic asylum, but could not get back before the paper went to press. The message was sent from headquarters to the First Precinct, near which the office of the newspaper referred to is situated. The sergeant who received it said to one of the men, "Just step round to the *Freie Presse* office on Myrtle Avenue, and tell the people there that Koselowski is at the lunatic asylum." The man hurried round to the office in question, and informed the astonished publisher that Cardinal McCloskey was in the lunatic asylum at Flatbush. The information, coming from a policeman, was deemed trustworthy, and upon the strength of it the *Freie Presse* announced, with startling head lines in the last edition, that Cardinal McCloskey was insane, and had been taken to the Flatbush Lunatic Asylum. Further particulars were promised in an extra edition. It is unnecessary to say that the "extra" did not appear. The ludicrous mistake arose either from the mispronunciation of the name Koselowski by the policeman, or a misapprehension on the part of the publisher.—*New York Times.*

THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

April 15th, 1877.

When requesting a change of address, subscribers will please give their former as well as their present address.

ANOTHER new Learners' Outfit is advertised in the present issue. It is called the "Prince of Learners," see last page.

AMONG other places THE OPERATOR is regularly on sale in this city at the corner of Broadway and Liberty St., at the corner of Broadway and Fulton, and in front of the Western Union Building.

We notice that our musical exchange, the *Art Journal*, has been increased to sixteen pages and is very much improved in typographical appearance. Telegraphers who love music and the fine arts, will find the *Art Journal* a very interesting paper. Its illustrations are of a very high order of merit.

THE DETROIT FREE PRESS.—One of the brightest, spiciest and most readable newspapers in the country at the present time is the Detroit *Weekly Free Press*. There's so much genuine fun, wit and entertainment in it, that we are not at all surprised at its increasing circulation. The price is only $2 a year, which, for so large and interesting a paper, is certainly not high. Those contemplating subscribing can obtain a specimen copy free by addressing *The Detroit Free Press*, Detroit, Mich.

MESSRS WATTS & CO., of Baltimore, have concluded a contract with Gamewell & Co., of New York, for the construction of the New Police and Fire Alarm Telegraph of Baltimore, also for the manufacture of a large portion of the instruments to be used. This firm has had long experience in the manufacture of telegraph and electrical apparatus, as well as in the construction of telegraph lines. The new Fire Alarm Telegraph for Baltimore calls for 175 miles of line, and 250 boxes, and when completed, it is believed that it will be the most perfect system in existence.

LEARNING SHORTHAND.—Having received numerous letters in reference to the best system of shorthand to make oneself acquainted with, in view of the telephone possibly superseding the present Morse telegraphy, we would draw attention to the two advertisements on this subject in to-day's issue. A new edition of Munson's Hand-book of Phonography has just been published in this city. The price is $2, on receipt of which we will mail a copy to any address, postage prepaid. Or a copy of Pitman's Manual on receipt of 40 cents. Remember, that no matter what you want from New York, whether telegraphic or electrical, if you will send your order to us, it will be promptly sent you at the very lowest price. THE OPERATOR Purchasing Agency has been established for just this purpose.

The A. and P. Again Reducing Rates.

The Atlantic and Pacific Telegraph Company made another important and sweeping general reduction of rates, taking effect April 9th.

Having completed a new through wire, it says, between New York City and Chicago, the construction of which was begun March 3, and having other new wire facilities in like progress between principal points, both in the East and West, the Company, in recognition of the very largely increased patronage extended to it under its latest and most important reduction in rates, announces the adoption of the uniform rate of twenty-five cents for ten words between all its offices east of the Missouri River, including Omaha, Nebraska, and Atcheson and Leavenworth, Kansas.

This company is now rapidly extending its lines south from Washington City, *via* Richmond, Norfolk, and the Atlantic coast route, and from Louisville, *via* Nashville and the principal interior cities, to Mobile and New Orleans, upon the completion of which, the benefits of low rates, it is promised, will be extended throughout the Southern States.

As usual, the Western Union immediately announced a like reduction to all competing points, to take effect same day. The Western Union tariff, however, to points not reached by the A. and P., remains unchanged. The old company seems much annoyed at these reductions, but does not attempt to out-strip the A. and P. by cutting under it, satisfying itself with lowering the rates when its enterprising rival compels it.

It would be interesting to know just how these repeated reductions affect the earnings of the A. and P. It seems to us that a twenty-five cent general rate scarcely pays for handling business. However, most messages only go a short distance, and the profit accruing from these makes up for the loss on a message to Missouri or Kansas. When the line is once up, moreover, and must be kept in repair any way, it is just as easy to send a message to Chicago, as it would to Newark, N. J.

The A. and P. annual meeting, we believe, is held during the present month. Perhaps we may be able to publish President Eckert's report in our next number. Mr. Orton claims that the A. and P. Company is losing $1,000 a day, and that the reductions of rates are merely done for the purpose of depressing Western Union stock. The stock has certainly been depressed, while A. and P. has gone up, but we hardly think the A. and P. would keep on reducing rates if the business did not pay.

The Western Union Company just now finds itself in an awkward position. The A. and P. compels it to send messages for twenty-five cents, which when, it had the monopoly, it charged a dollar and a half or two dollars for. All it can do is to come down to the A. and P. rates, to points reached by that company, charging old rates to points where its rival has no office. In the meantime, towns and cities off the lines of the A. and P., are petitioning that company to extend its lines thitherward, and the company is daily increasing its facilities and opening new offices, so that in a short time, if something be not done to prevent, the Western Union may either find its occupation gone or be compelled to handle business at a much smaller profit than at present.

Public Exhibition of Gray's Telephone.

An exhibition of Elisha Gray's telephone was given in this city on the evenings of April 2d, 4th, and 6th, and in Brooklyn on the 3d. Steinway Hall was crowded on the first exhibition. Previous experiments, under favorable atmospheric conditions, had demonstrated that the sweetest and clearest tones could be wafted over the wire from Philadelphia, but when the test came, and the public were there to enjoy music played over ninety miles away, Old Probabilities took it into his head to send weather exactly the reverse of that required to make the telephone a good transmitter of harmony.

Professor Gray, in an introductory speech, said that the telephone was exhibited not merely as a musical instrument, but as something wonderful in the science of electricity. It cannot, he said, produce as fine music as the audience had heard that night in the hall, but can be heard further. He explained that the weather was bad for the telephone. It had been raining all day, and the wires were wet, so that as loud sounds could not be obtained as would be under favorable circumstances. A good deal also of the volume of sound produced in Philadelphia would leak out in its passage over the wire. "Home, Sweet Home," "Then You'll Remember Me," and other tunes were then given, and created a genuine furore among the audience, who applauded vigorously. The music was low and soft, but could be heard all over the hall. It sounded about as loud as that produced by blowing through a comb covered with tissue paper. The low notes were quite audible, but the higher notes sounded like a desperate effort of a broken voice to reach a high range.

At the Brooklyn Academy of Music the following evening the exhibition was a complete success, the weather being very favorable. The melodies which were faint on the previous evening now sounded clear and strong. The tunes were attentively listened to and enthusiastically applauded. At the subsequent concerts in Steinway Hall the weather was also favorable, and everything passed off with perfect satisfaction.

At the different offices on the wire the music could be distinctly heard, and many "cut in" to enjoy it. In Philadelphia, however, where the music was played, no sound at all could be heard, save the unmusical rattling of the keys. As our readers are probably already aware, Prof. Gray's telephone is, briefly, as follows:

A tongue of metal is arranged to vibrate automatically between two electro-magnets, when the electric current passes. Of course the number of vibrations per second of the tongue is dependent upon its length, and consequently two tongues of different lengths will have a different number of vibrations, which, when translated into sound, will produce different notes. If we have sixteen tongues, then it is evident we may produce all the notes of two octaves. With each tongue, connection is established from a different key on a key-board, so that, by pressing any key, the current passes and the corresponding tongue vibrates, and in so doing breaks and closes the circuit of the main telegraph wire. Therefore the latter is caused to transmit vibrations perfectly synchronous with those of the tongue; and these pass to an electro-magnet at the receiving station, which, instead of an armature, has a steel ribbon stretched on a metallic frame. This ribbon is tuned to vibrate at a particular pitch; and hence if the vibrations which pass over the main wire are in accord with it, it will then and then only be thrown into vibration, and will produce sound. As there are as many receiving instruments as sending ones, it follows that the vibrations of any one tongue may be imagined as searching through all the receiving ribbons until one is found which vibrates correspondingly. In this way any note produced at the sending station is reproduced at the place of reception; and whether one or a dozen or more notes are sounded at once, the vibrations will all disentangle themselves, and each set will affect its correspondingly pitched ribbon. This is a very general description of an exceedingly beautiful invention, the practical value of which lies especially in its adaptation to the purposes of multiple telegraphy.

Frederick J. Grace.

Mr. Frederick J. Grace, well known to the telegraphic fraternity for his long connection with the telegraph business, and for nine years past as editor of the *Journal of the Telegraph*, died at his residence, Fanwood, N. J., April 1st.

Mr. Grace has been sick for some months past, and it was evident to himself, as well as his friends, that he had not long to live. His disease was bronchial consumption. The end was probably hastened by the sudden death of his youngest child, Gussie, a beautiful little girl, from an attack of membraneous croup. This occurred March 30th, and he had not strength sufficient to stand the shock which it gave him. He was very much attached to this daughter, and never rallied after he was informed of her death. The funeral of both took place from their late residence on Tuesday, the 3d inst., and was attended by a numbe of his late telegraphic associates.

Mr. Grace was a man of ability, a kind husband and father, and his early death will be much regretted. He was in his fortieth year, and leaves a wife and three children to mourn their irreparable loss.

Lightning Flashes and Electric Dashes.

We have received since last issue a large number of orders for three copies of the new book, accompanied by post-office orders for $3.75. We would be pleased to receive more of these. There are very few of our readers who cannot obtain two names besides their own. Introduce the book to your friends, and send us all the orders you can, but anyway send for a copy for yourself. Every telegrapher in the country should have a copy of "Lightning Flashes."

In Reference to Correspondence.

Your remarks in the last issue of The Operator in regard to communications are correct, and, I am sure, will meet with the hearty approval of the majority of your readers. Because some young gentleman on a line in New Jersey is "sweet" on Miss I, at "Qz," it is not probable that it will be of any particular interest to any one not working on that line. A very few may be pleased to learn that "Jimmy B. sports a new plug hat," etc., while to the balance of your subscribers an extract from "Mother Goose's Melodies" would be quite as entertaining. Four or five lines from the correspondent asking for information as to the size of ground plates for his short line, is of more interest than a column of verbosity on the plug. Communications should be either instructive or amusing to all. Our friend "Werner" has the happy faculty of combining the two. While we appreciate any scientific information relating to the profession, we have no desire to be treated to an elaborate description of the Wheatstone Bridge spattered over with algebraic characters (see W. [illegible] organ), and — but here, if I keep on you will say I am too lengthy and drop this in the basket. G. N [illegible] Br

Doniphan, Kan., April 3d, 18[illegible].

Dashes Here and There.

How have the mighty fallen! A. L. Dick, well known for many years as a very unpopular telegraph superintendent, and who was mulcted in $5,000 last year for a slander against a young lady telegrapher, advertises in one of the Syracuse papers: "If your sewing machine breaks needles, skips stitches, runs hard or needs cleaning, repairing, or adjusting, send it to or advise A. L. Dick, 21 Grape Street."

Scene on No. 4, East.—Jules Guthridge, lazily grinding out press, says "N. M." at end of item referring to auction sale of hosiery.

Hartford—"(W)ho'se interested in that?"

Boston—"I take no stock-in it."

Bridgeport—"That's the darn-dest pun I ever heard."

Worcester—"Oh, he'el do; it's to(e) bad, though, it isn't leg-itimate."

An Irish Bull.—A good bull was recently perpetrated in connection with the title of a lecture by Hon. Sunset Cox of New York. Sunset telegraphed from Chattanooga to Mr. Bain of Atlanta that his subject would be "Irish Humor," but when the message reached Mr. Baine it read "Just Human" and was so announced. When the lecturer took the stand he said: "the message was only bulled, ladies and gentlemen, but I am sorry to say that it was certainly an Irish bull."

Under instructions from Washington, the employés of the United States Mililtary Telegraph are forbidden to furnish items of general news to the press. The sum paid for news to the different operators was a welcome addition to the miserable pittance allowed them by the Government, and there seems no good reason for depriving them of it. We dislike to see that part of the army snubbed, which has done so much to redeem it in the estimation of civilians.—*Arizona Sentinel.*

Though we are pleased to receive such words of encouragement as the following, we seldom publish them. However we make this case an exception:

"My old friend The Operator came duly to hand, and 'Oakum Pickings' followed in due season. I am more than pleased with Mr. Phillips' book, and hope he may realize handsomely upon it. The profession should be proud that we have such talent as his among us. Was surprised, indeed, to find The Operator so much improved and so flourishing a sheet, not having seen it in two years. Success to 'Lightning Flashes.' I shall want a copy."

The Grand Duke Alexis and a party of distinguished Russians examined Elisha Gray's telephone last Sunday, at the Western Union office, 23d street near the Fifth Avenue Hotel. The Russian national hymn, Yankee Doodle, and several sacred airs were played from Philadelphia. As Prof. Gray explained the telephone, Alexis seemed rather puzzled, but finally said that while the instrument would probably never be of use as a musical convoy, it might in time be found serviceable in commercial, diplomatic and military intercourse. To this view the Admiral objected, thinking the telegraph far preferable because it could be used so that none but the two operators need understand the message, while the telephone would prove a tell-tale to all who cared to hear.

The Montreal Telegraph Company. This company from a small beginning has grown to be quite an extensive corporation. The company was incorporated in Canada in 1847, and has consequently been in existence thirty years. The line from Toronto to Buffalo was built about the year 1848. It was called the "Toronto, Hamilton and Niagara River Telegraph Co." This line was strung with copper wire, and offices were opened at Toronto, Hamilton, St Catharines, and Queenston. A line owned by David Kissock, running from Buffalo to the Suspension Bridge, by way of Lockport and Niagara Falls, N. Y., joined the Canadian line at the Bridge. The American line was strung with iron wire. Another short line ran from Chippawa to Niagara, passing through Queenston, where all messages were repeated or transferred. The Montreal Telegraph Company having bought both these lines, at this time owned all the wires in Canada. The company in recent years has rapidly grown and multiplied its resources, until now, it has in working order over fifteen hundred offices, using twenty thousand four hundred and seventy nine miles of wire for its own business, and gives employment to thousands of persons.

Themes for the Thoughtful.

All who laugh are not mirthful.

Polite assemblies are masquerades.

Great truths are only known to great people.

The study of man ought to be the school of humanity.

We may be as good as we please, if we please to be good.

To be angry, is to revenge the faults of others upon ourselves.

A trifler is the most insignificant in the vocabulary of characters.

Whatever charity we owe to men's persons, we owe none to their errors.

Wisdom often revokes; the opinions of pride and ignorance are irrevocable.

Long sentences in a short composition are like large rooms in a little house.

People seldom improve, when they have no other model but themselves to copy after.

It is one thing to do that which is justifiable: but another that which is commendable.

The tenant is not to be judged by the tenement. A weak body may enshrine a noble soul.

Books have more influence on the happiness of mankind than all the goverments on earth.

Before a reputation is established, it passes through all the gradatory shades from black to white.

The tongue of a fool is the key of his counsel, which, in a wise man, wisdom hath in keeping.

Of all our infirmities, vanity is the dearest to us; a man will starve his other vices to keep that alive.

It is politic to wear good clothes—more people are capacitated to judge of the garb than of the man.

Many are discontented with the name of idler, who are nevertheless content to do worse than nothing.

As riches and favor forsake a man, we discover him to be a fool, but nobody could find it out in his prosperity.

Love is above all; and when it prevails in us all, we shall all be lovely, and in love with God, and with another.

The blandishments of art may engage our attention the quickest, but simple nature will have the longest claim to it.

I love the man that is modestly valiant, that stirs not till he must needs, and then to purpose. A continued patience I commend not.

It is with narrow-souled people as with narrow-necked bottles; the less they have in them, the more noise they make in pouring it out.

If you would teach secrecy to others, begin with yourself. How can you expect another will keep your secret when you yourself cannot?

It is commonly seen that the more mankind are favored with the gifts of fortune, the less they are disposed to assist those that are destitute.

He that would make a real progress in knowledge must dedicate his age as well as youth, the later growth as well as the first fruits at the altar of truth.

The sacred books of the ancient Persians say if you would be holy, instruct your children, because all the good acts they perform will be imputed to you.

In the eagerness to be serviceable, we sometimes forget how little we can perform. This is a sweet earnest of benevolence, that wants only the means to be complete.

Such is the blindness of man, [illegible] the cruel delicacy of his chosen companions, he remains ignorant of his greatest [illegible] till it is [illegible] to replace them.

We do not always like those we value, or [illegible] those we like. Where hospitality alone should be found, there is frequently envy [illegible] or ostentation.

He that does good to another man does also good to himself, not only in the consequence, but in the very act of doing it; for the conscience of well doing is an ample reward.

Summers' "Automatic" Telephone.

Electricians and telegraph operators are fond of practical jokes. The mysterious science which to them is as clear as an alphabet upon a blackboard, though a sealed book practically to the world at large, affords them a splendid opportunity for imposing upon the credulity of mankind. The electricians and other employes about the Chicago Western Union telegraph office are never happy unless they have some "sell" under way with which to treat their inquisitive visitors and good-natured friends. The boys, apparently, lie awake nights cogitating new schemes and perfecting crude ideas for playing practical jokes on innocent victims. The room of Mr. Summers, the electrician of the company, has a sort of dreaded air about it to the great army who have been, first and last, initiated into the mysteries of its electrical apparatus. Telegraph superintendents from numerous lines, and surrounding cities, can bear testimony that they have been initiated into the strange discoveries which Summers has brought out, and that a small portion of their substance has found its way into the cash box which is provided to receive the voluntary initiation fee when the jokes have been explained. These fees are used to defray the expense in purchasing "materials," but there is a faint suspicion that the perpetrators of the "sells" are reaping a rich reward in the matter of dividends, which are supposed to be devoted to "stews" and choice cigars. However, this is all right.

The telephone which Prof. Gray invented some time ago afforded an opportunity for Summers to add one more to his repertory of jokes. When the telephone was first worked over at the Western Union office, the electrician's room was daily thronged with people who desired to see, hear, and go into raptures over it. The thought struck Summers that he could get up a telephone that would give out better music than Gray's, and be really more of a wonder. So he set his wits to work, and before long had something that was a perfect "marvel." For weeks curious people dropped in to hear it play, marveled, saw through it, dropped their pennies into the contribution box, and went out to laugh with those who had gone in before them, and use their influence in getting new victims into the net. This is how it was done. A small music box was placed under the casing of an ordinary relay magnet, everything about which looked like an ordinary telegraph instrument, and which it was in fact, with the exception of the magnet portion. The joke was played in this wise. A victim had dropped in to see the telephone. He was asked which he would rather hear—the Gray instrument or the "automatic," the latter, it being held, was sweeter in tone owing to a new and improved method of producing the music. Of course, he wanted the "automatic." Charlie Wilson at once whistled up into the operating room to a gentleman in charge of the switchboard (and who was a party to the sell) that some music was wanted. This person made a pretense of communicating with a Mr. Goodrich, who was in Gray's room in another part of the building. Word was sent back in two or three minutes that the music would be forthcoming. Wilson would again speak to the man up stairs, after having gone into the next room to get a relay instrument—the one with the music box in—and ask what wire to connect on. "Put on loop No. 10," would probably be the reply, and Summers, meantime, would be carrying on a serious conversation, telling Wilson that he mustn't get too strong a battery in for such a short circuit, for it would burn the cores of the relay up. In the meantime, Wilson, having connected the wires with the instrument, would be asking why the music didn't come, and would be told the man down stairs was fixing something or doing something to the wires. "Haven't you got too much resistance on that wire?" Wilson would shout up the pipe. "By Jove, I guess I have," would be the answer. "I'll change the battery." Then, Wilson having pulled out a small copper wire which passed into the covering of the instrument, ostensibly for electrical purposes but really to set the music box going (it having been wound up before being brought into the room), the instrument would play half a dozen sweet airs in rapid succession. There was no end to the wonderment depicted on the countenances of those who heard this marvellous invention. Some would object that no person could manipulate keys fast enough to play such quick airs, but Summers would answer that there were no keys to this machine, that it was operated much as a grindstone, and the harmonious sounds thus produced. When the music would cease, Mr. Summers would go up to the box and attempt to disconnect the wire leading from the switch board, but would let it drop with an exclamation that such strong batteries should not be used, as the electric fluid was hot enough to burn anything that touched it, and had burned his fingers. He would thereupon take a piece of paper, unfasten the screws, and carry the "telephone" over to the window. For several minutes it would be looked upon and examined with much wonderment. Perhaps the visitor would see the key hole (a round orifice in one end of the box), and ask what that had to do with it. "Why, you see," Summers would reply, taking the key out of his pocket, "after the thing has run down we have to wind it up, thus," and inserting the key he would give it a few turns and the "telephone" would begin emitting the same tunes which but a few minutes before had come over the "wires" by "telegraph."

It was at this stage that the victim saw a box with a hole in it—and bearing a legend that the deposits were intended to defray the expenses of buying the music box—held before his eyes, and his hand involuntarily went into his pocket for a stray piece of money to add to the mites that had been contributed before his.

A couple of weeks ago, Armstrong, of the Cincinnati telegraph office was put through the mill, and when he returned home he invited a large number of gentlemen—electricians, newspaper editors, reporters, etc., in to see it work. The connection was made with Chicago, where the music was supposed to be played, and for some time the audience was completely bamboozled. It was as complete a sell as was ever perpetrated. In this city, old and experienced telegraphers, managers of lines, and experts in electrical science have been completely taken in by the new "telephone." Summers is now throwing his mind against something new. It don't do to ask him too many questions about the electrical instruments you may see about when you step into his room."

The above is clipped from a recent edition of the Chicago *Times*. It is not because your correspondent did not know of this "improved" or automatic "telephone" that he allowed the *Times* to beat him on giving its workings to the public, but rather that he wanted to give the *Times* man an opportunity of walking into the trap.

OCCASIONAL.

Rushed Into Matrimony.

Talk about April fool practical jokes, a very amusing one recently occurred down on the Ala. & Chatt. R. R. It is not pleasant to have to mention names, but the incident is too good to keep.

Mr. John R. Hill, the operator at Carthage, was to have been married on Wednesday. On the Monday evening previous Mr. J. B. Harris, operator at Eutaw, to tease John a little, sent him a message signing the Superintendent's name to it, in which he was notified of his appointment as agent and operator at York, Ala., in place of Mr. Hoot, the present incumbent. John was highly elated at his new appointment. Of course he could not keep the good news to himself, but put out forthwith for the residence of his adored one, to communicate to her the joyful tidings of his unexpected preferment.

In the meantime Mr. Hoot, hearing the message as he sat in his office with his feet stuck up on the table, and a cigar in his mouth, little dreaming of a discharge, became very much alarmed. He did not know anything of the joke and was quite puzzled to understand why this was thus. He threw away the cigar, jumped to his feet and wildly declaimed as he walked up and down the office: "I have done nothing to merit discharge, and I want an explanation!"

Mr. Hill was very much pleased at his promotion, but it troubled him to think of leaving his sweetheart. He couldn't think of doing that. The coveted prize was too nearly his to let it thus elude his grasp. But they soon fixed that matter. What obstacles will not love surmount? The young couple decided that they would get married that very night and start for York on the 6.40 A. M. train on the following morning. It was 4:45 P. M. when John received the message. Preparations were immediately made for the marriage. The prospective bridegroom mounted a horse and rode to Greensboro', 36 miles away, to procure a license. He returned in due time and was duly and lawfully wedded to his loving Jennie, while Harris, the perpetrator of the too successful sell, was at that very moment enjoying pleasant slumber, blissfully unconscious of what trouble and fatigue he had occasioned his old friend and pupil.

John and his bride took the train next morning for York. Everything moved along swimmingly, and when they reached Eutaw John rushed breathlessly into Harris' office, and while his face fairly shown with delight, took Harris warmly by the hand, and exclaimed excitedly, "Oh! Harris! Congratulate me, old man. I've been appointed agent and operator at York. Didn't you hear the message the Old Colonel sent me as it was wafted o'er the wire? Why I'm all O. K. now. Come out and let me introduce you to my wife. We had to hurry up our marriage a little on account of my appointment, as we couldn't bear the thought of being separated. Come!"

This was news for Harris, who now felt heartily sorry for having played the joke on his friend. He felt as miserable over the affair as Hill felt elated. How in the world was he to break the sad news to John, who seemed perfectly intoxicated at his promotion? But it must be done, and he did it, as tenderly and gently as he could. When John heard that it was all a diabolical practical joke at his expense, his bright castles in the air collapsed with a sudden thud, and he stood for several moments perfectly dazed, as Byron says "agonized and full of inspiration gathered from distress, as when the heart-strings, like wild horses, seem to pull the heart asunder." But he couldn't store up anger against his friend, so he took the matter good-naturedly, and returned with his bride by the next train to Carthage, where he still agitates the electric fluid. We hope the worthy couple, wedded two days before they were ready, will ever find life rosy and pleasant, and if a little male stranger be eventually added to their family, we should strongly advise them to name it John Harris Hill.

A Plug's Confession.

I am a plug, and the quicker you try to salt me the sooner you will be able to vouch for what I say. I don't like to be salted, or, in other words, rushed; in fact, I think telegraphing is like love, too much of it is done in a big hurry. I'm a plug with a good deal of patience, which is known by many a sufferer on our way wires. I find hanging on the hook a lone message for Sweet Valley—what a lovely name—but how I open my eyes when I look on the back of the message and find indorsed thereon the time when other plugs called during the day. I'm almost afraid to call "Sr" for fear he will answer me. Of coarse, I'm a lucky plug, for I call him but a few times when "I I S4" comes trembling over the line. I start off in the usual style and get half way through, when I feel a break "R R ga stow my haper run out." I then mutter a little to myself, take a fresh chew, put my feet upon the next chair, and take my time. If we take our time, especially when kissing the girls, a satifactory result is sure to follow. Just so in sending to Sweet Valley. You have the satisfaction of knowing that if you are ever put off the train at that beautiful spot you will be invited to dinner and called a splendid operator if you make yourself known.

But to my confession. I'm a plug who never asks questions of first-class men. I never salt, because I know I will surely be salted in return. I, perhaps, sometimes say bad things (so much for confessing), but I invariably call my brothers of the fraternity first-class men. I find this works well, because if I call a plug a first-class man he will generally, without considering my merits, promptly return the compliment. I never call another sufferer of my stamp a plug, lest he might think I was a plug also. I draw my salary at the end of the month and ask no questions. I lend to first-class men all the money I can spare. In buying tobacco, I measure the chewing capacity of our pet night force, and govern my purchase accordingly. I work until the sinews of my neck feel sore and stiff, and get up from my desk calling myself a lucky man, while in my mind I fairly feel these words choking me: "Oh, boyhood days come back! Come back, that I may learn an easier road to great wealth."

I have six sons all learning telegraphing (to fill positions) who won't work for less than a hundred a month. I will send them to Mexico to join the Mexican army first. (See what faith a plug has in our peculiar business.) Managers will please take notice. In conclusion I will say that as long as Juliet sticks to me I will be contented, though I *would* like to be a first-class man, strictly speaking, salary $100. I sign "Rm." Now you salt me!

ROMEO.

THE Direct and Anglo-American Cable Companies, after much resistance on the part of the former, have at last amalgamated. The directors of the Direct Company immediately resigned.

Philadelphia Items.

The transfer of the Philadelphia main office from Third and Chestnut to Tenth and Chestnut streets was very successfully made on Sunday, April 8th, and the operators are now comfortably quartered in their new office. The change was made without any delay of business or inconvenience to any one, for all of which Mr. Hubert McAleer, chief of construction, deserves very great credit. The great number of wires were successfully run, and loops re-run, without a single mistake, and when the operators from Third and Chestnut streets, headed by Mr. Charles Moore, reached the new office, they found everything in perfect order, with the brand-new instruments calling "P" just as naturally and persistently as if they had been established there for years. A very large branch office has been established at Third and Chestnut, under the management of Mr. J. W. Dyer, assisted by Messrs. Swan, Foley, Sherer, Prosser and King. They are now doing an unusually heavy business. The only inconvenience experienced as yet in the new office is caused by the stoppage of the elevator at five o'clock P. M., and as there are 119 steps, by actual count, to ascend, the operators have to start the upstairs journey considerably ahead of their proper time for duty. But there are hopes, slightly founded, however, that this will be remedied in time. Two large electric clocks, which keep Hong Kong and Greenwich time respectively (anything but Philadelphia time) have been placed in the operating room, at enormous expense, and a cheap one has since been added for genuine time-keeping purposes. To sum up generally, the operators of Philadelphia have an office which, in the matter of elegance and comfort, cannot be excelled, and judging from their beaming faces and the happy greetings one receives on entering their quarters, there is every reason to believe that they are happy and content.

WERNER.

* * *

PROF. A. GRAHAM BELL made some very interesting experiments with his telephone over the A. and P. wires in this city last week. Conversation was carried on between this city and Boston to the wonder and delight of the officers of the A. and P. and visitors present. Prof. Bell has received from the judges of the late International Exhibition at Philadelphia an award for his electric telephone and multiple telegraph. The report of this award, which was written by Sir William Thompson, and approved by his associate judges, says of Mr. Bell's invention that the apparatus includes an ingenious and effective instrument for automatically making and breaking an electric contact every time one of his telegraphic musical notes commences and ceases to sound. Thus his multiple telegraph may be made self-recording (after the Morse or Bain method), or may be worked forward by relays through greater lengths of line than imperfectness of the insulation allows to be worked in one circuit. The report speaks of this invention as having many practical advantages over other methods of multiple telegraphy, and is very complimentary throughout to Mr. Bell for his solution of a difficult problem. Now that we have had a practical demonstration of what Elisha Gray's telephone is capable of, why does not Prof. Bell introduce his system to a metropolitan audience?

THE TELEPHONE TO BE OUTDONE.—A rival to the telephone is announced. It is called an electroscope, and is the invention of a New York electrician. By its use it is claimed that friends thousands of miles apart—more or less—can see each other. It is constructed, according to the inventor, upon the plan of the optic nerve, which radiates into almost innumerable fibers as it approaches the retina of the eye, each fiber being sensitive to a certain light ray from the object whose image is formed upon the retina. Copying this arrangement, the inventor has a receiving box sensitively pierced by hundreds of the finest wires, which run together and form a cable. Each wire answers to one of the nerve fibers of the eye, taking a point of light from the object in the receiving box, and transmitting over the cable to the other end, where the wires, radiating into a box filled with a gas or ether, the nature of which is kept a secret, upon which the transmitted waves of light are thrown, produce a phantom the exact counterpart of the object at the further end of the wire. The inventor has not yet completed a working model, but he has abundant confidence in his theory.

* * *

It sounded like M. A. Rian, and was received that way instead of Marian, by a Nevada youth.

Plugs in Montenegro.

LONDON, March 20.—Reuter's telegram from Constantinople reports that the Montenegrian delegates having telegraphed to Cettinje for a repetition of the Prince's dispatch, which was indecipherable, received to-day a fresh telegram, which was likewise unintelligible. They have again asked for a repetition.

* * *

REGULATING THE CLOCKS.—The standard time as determined daily by the naval observatory at Washington, is to be received at the Western Union main office in this city for the benefit of shipowners and masters, business men, railroads, etc. Public clocks in New York and other cities are also to be kept regulated. At 11 h. 55m. a time-ball will be hoisted half way up the iron flag-staff on the tower of the Western Union Building, which will remain at half-mast from 11h. 55m. to 11h. 58m. At 11h. 58m. it will be hoisted to its highest point, about half-way up the main staff, and dropped by an electric signal at exactly noon by New York time.

* * *

There is no wire however watched or tended,
But one base plug is there,
Whose Morse, from the distressing way he sends it,
Calls forth a silent swear.

PERSONALS.

Mr. James Adie is with the Montreal Telegraph Company at St. Catharines, Ont.

A new B. and A. office has been opened in East Albany, with Mr. Henry Smith in charge.

Mr. A. G. Haight has accepted a situation with the W. U. at Augusta, *vice* Mr. W. A. Benton, resigned.

Mr. N. C. Schlemmer, formerly manager of the Ogden, Iowa, W. U. office, has been appointed W. U. manager at Troupe, Texas.

David Dunlop has been transferred from Cow Bay W. U. Tel. Office, to North Sidney, C. B.; Mrs. Miller, from Port Hastings, taking his place.

Mr. J. H. Perhamus, formerly telegraph operator at Parhage Bridge, N. Y., has been appointed agent N. Y. C. & H. R. R. Co., at Fishers, N. Y.

Mr. E. A. Brown has resigned the night managership of the C. P. R. R. Company's office at Reno, Nevada, and been succeeded by Mr. G. A. Eaton.

Mr. W. D. Farren is the manager of the N. & N. Company's office at Silver City, Idaho, and Mr. W. W. Calkins for the same company at Boise City, Idaho.

The North Sidney C. B. operators have lately organized a Debating Club, and every week get through subjects that the world has been pondering on for centuries.

One of the Augusta men asked a lady to subscribe to THE OPERATOR. "No!" she replied. "There is only one operator I want. If I can't get him I don't want any!"

Mr. J. J. Powers, of the A. and P. office, Chicago, is agent for THE OPERATOR, Oakum Pickings, Lightning Flashes, etc., on the lines of that company in the West.

A private reception was tendered the Misses Enright of the Western Union main office, at their residence 183 Henry Street, this city, April 13th, at which many telegraphers were present.

Mr. J. H. Lounsbury has been appointed manager of the A. & P. office at Hartford, Conn., *vice* Mr. R. S. Keith. The appointment is an excellent one, and Dick's many friends will rejoice at this piece of news.

Mr. Joe E. Hurley, night chief of the Augusta W. U. office, has been very ill with typhoid fever for the past month, but is convalescing very fast and will soon resume his duties.

THE Pensacola Telegraph Co., has opened a branch office at Pensacola, Fla. This company is now doing a very lively business under the energetic management of Maj. C. L. LeBaron, Pres., and C. LeBaron, Jr., Supt.

Miss Emily Wallace is operator at Camp McDermott, Nev., for the N. & N. Tel. Co. From present appearances she will shortly bring one of Nevada's spicy journalists within the confines of a "short circuit."

Miss. Ina Cheney, of Manville, R. I., is said to deserve the appellation of "The pupil's friend." Her willingness to respond to calls for slow writing is only equalled by her patient submission under the most exasperating tortures from these aspiring plugs.

Mr. Jay G. Hall, for several years manager of the W. U. office at Jackson, Mich., has been transferred to Detroit in consequence of an agreement entered into at the time of the consolidation of the American Company. He has been succeeded by Mr, John M. Myers, the former manager of the American line.

Mr. A. J. Blauvelt, of the New York *Bulletin*, and an old telegrapher, is residing on the hill, which is the most beautiful part of the little city of Passaic, N. J. Philadelphia telegraphers will probably be glad to hear that Mr. B. is as kind-hearted and genial as ever, and often inquires about the boys.

Mr. Hughes (whose platform name is Robert) is the gentlemanly night manager at Summit, *vice* "Watts—his name," who has been appointed agent to fill the vacancy caused by the transfer and promotion of Mr. H. H. Francisco to Gold Run station, C. P. Railroad, where he is now happily ensconced among the land of flowers and pretty girls.

The Kansas City lines were rebuilt last year, at an expense of $6,000. There are four branch offices, Grain Exchange, in charge of Charlie Davis, Live Stock Exchange, with Andrew Brady in charge, Union Depot, under the supervision of Eugene Davis, and Coate's House, in charge of Henry E. Carver. The Gold and Stock Co. is doing a good business in Kansas City.

C. B. & Q. BOYS—EASTERN DIVISION.—At Leland, S. Brown and A. Metcalf waft the fluid day and night respectively. Miss Gammon is operator at Earl, the only lady operator on the division. At Somonauk are Joe McNevin and John Mack. Sandwich is sustained by Swett and Kam. Plano, by Sherman and Hodgetts; Bristol, by R. S. Lord and F. Doten; West Aurora, by W. C. Corus and S. W. Miller. At Aurora yard office are Bree and Hoyt. At Naperville, E. E. Lacy and Wilson. At Downers' Grove. E. W. Farrar and H. Lehman. At Ainsdon, H. L. Tubbs and H. A. Pearsall, and at Riveside, W. C. Wilkinson and Pooler.

The new Western Union office at Augusta, Ga., was opened last week. It is a vast improvement on the old one, and the employes feel correspondingly happy. There are eight very handsome quartette tables. Twenty-four wires enter the office. The battery room contains four batteries, two of fifty cells each, one of seventy-five, and one of one hundred. The Augusta operators are Messrs. J. M. Crowley, manager, J. W. Brown, electrician and chief operator, W. E. Seward, A. H. Spracklen, J. E. Hurley, A. Potter, T. A. Boyle, T. B. Yarborough, J. W. Potter, J. P. Bignon, A. G. Haight. Mr. J. A. Brenner is District Superintendent.

THE ST. CATHARINES, ONT., M. T. OFFICE.—Telegraphing in St. Catharines dates back to 1848, though very little business was done until 1852, when Mr. J. T. Townsend now General Inspector of the company, was appointed manager. The late Mr. Wm. Smith became manager in 1856, and held the position until his death last year. Mr. Thomas E. Dudley, the present incumbent, has been connected with the office for thirteen years. Mr. J. S. McClelland, the operator, is well known in telegraphic circles as an expert telegrapher and genial gentleman. Mr. James Addie, the bookkeeper and assistant operator, has literally grown up with the office. His good nature and gentlemanly bearing make him very popular. The company has branch offices at Welland House, James Foster operator, Spring Bank, Miss Amy Smith operator, G. W. R. Station, R. T. Randall operator, W. Ry. Station, John Vanderburgh operator. An office will also be opened in a few days in the Grand Central Hotel. During the year 1876 no less than thirty eight thousand one hundred and thirty messages were handled at this point, exclusive of about half a million words of press dispatches.

BIRTHS.

On Sunday, March 4th, 1877, to J. H. Perhamus, agent Fishers, N. Y., a daughter, nine and a half pounds.

DEATHS.

March 26th, at North Sidney, C. B., of scarlet fever, Donald Sutherland, son of George and Flora Crew, aged 8 years.

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Electric Power Co.,

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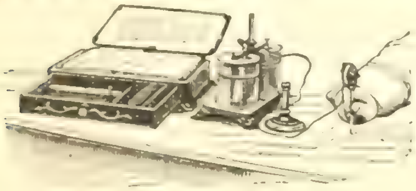

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A.D. 1900.

ANCIENT KNIGHT, PROUDLY—"Yes, Tommy, I was for many years an operator, and in my time transmitted many messages over the wires."

TOMMY, INTERESTED—"What did you used to sign, Papa?"

The above graceful little sketch by Mr. J. J. Calahan, in the new book, LIGHTNING FLASHES AND ELECTRIC DASHES, speaks for itself. Mr. Calahan has over a dozen pictures in the book, nearly all of them making a full page each. A large number of other artists, telegraphers and outsiders, are also represented in LIGHTNING FLASHES, so that the book literally overflows with excellent engravings, and to telegraphers especially must prove a "joy forever."

Every Telegrapher wants a copy of LIGHTNING FLASHES. Although the expense of the work, on account of the size of the book—the page being fully three times the size of OAKUM PICKINGS—and the very large number of engravings prepaid especially for it, has been very great, we hope to dispose of a large number of books, and have therefore decided to put the price down to $1.50 a copy. From the following names of some of the "Star" contributors, it will readily be seen that LIGHTNING FLASHES AND ELECTRIC DASHES will be decidedly the most entertaining and enjoyable Telegraphic book yet published.

JOSEPH CHRISTIE, "Werner,"
E. O. CHASE, "Nuf Ced,"
W. P. PHILLIPS, "John Oakum,"
D. C. SHAW, "Oney Gagin,"
T. C. NOBLE, Jr., "Chops,"
G. W. RUSSELL, "Ruddy,"
CHAS. E. WATTS, "Yosef,"

BENSON J. LOSSING, LL.D., Author U. S. History and other Works
CHARLES BARNARD, Editor "World's Work," *Scribner's Monthly*,
J. D. REID, Secretary G. & S., ex-Superintendent, and ex-Editor,
J. A. CLIPPINGER, Author "Pedagogues of Widows' Gulch,"
RALPH W. POPE, Inspector G. & S., Telegraph Co.
J. M. M., Author of "Was She Wrong?"
GEO. H. BLISS, Chicago, and many others.

The book is beautifully bound in FULL CLOTH, like OAKUM PICKINGS. No telegrapher can consider his library complete without a copy of LIGHTNING FLASHES; and as all the matter in it can be understood by persons not connected with telegraphy, it is hoped that the book will have a large sale among outsiders. Agents are wanted everywhere to introduce the book.

We will send LIGHTNING FLASHES, prepaid, to any address, on receipt of price, $1.50; LIGHTNING FLASHES and OAKUM PICKINGS, $2.75; LIGHTNING FLASHES and THE OPERATOR one year, for same sum; or all three, $3.75.

To Agents we will sell the book for $1.25 a copy. Three copies must, however, be ordered at one time, to secure this reduced rate. Single copies will afterward be sent at same price. Get two of your friends, Telegraphers or outsiders, to join you, and order three copies at $3.75.

☞ To any one sending us orders for four copies of LIGHTNING FLASHES, at regular price, $1.50, we will send an extra copy free and postage prepaid. Send in orders as fast as received, and they will be placed to your credit, and can be added to at any time.

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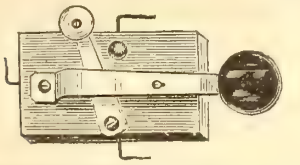

Having 250 Sounder Cut-Outs and Key in stock, which must be sold, they will be mailed to any address on receipt of Sixty Cents currency or stamps. I will cease the manufacture of them after this lot is disposed of. Send for circular.

Send money by mail. Give plain address.

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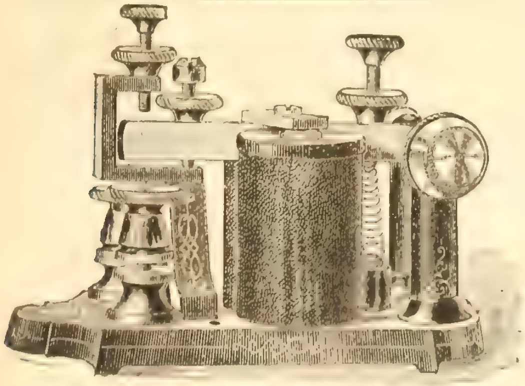

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As shown above, cut half size, *has no superior* for practical use, is well made, finely finished, gives a loud, clear, agreeable sound, works on any length of Railroad or Commercial line as a "LOCAL" or "DIRECT" on line ten miles or less.

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Designed expressly to match the Specialty Sounder, is of standard size, well made, finely finished, of brass throughout, except the ornamental iron base, and gives *entire* satisfaction on any length of line.

Specialty Sounder,	C. O. D.	$4.00	Cash,	$3.00	by Mail,	$3.50
" Key,	"	2.00	"	1.60	"	1.70
Battery No 1 Callaud,	"	1.15	"	1.25		

Specialty outfit complete, consisting of Sounder, Key, Battery, Chemicals, Wire & Manual, C. O. D. $7.75, Cash 6.25

Extra resistance of Sounder for line from one to ten miles, 80 cents additional. In ordering state length of line.

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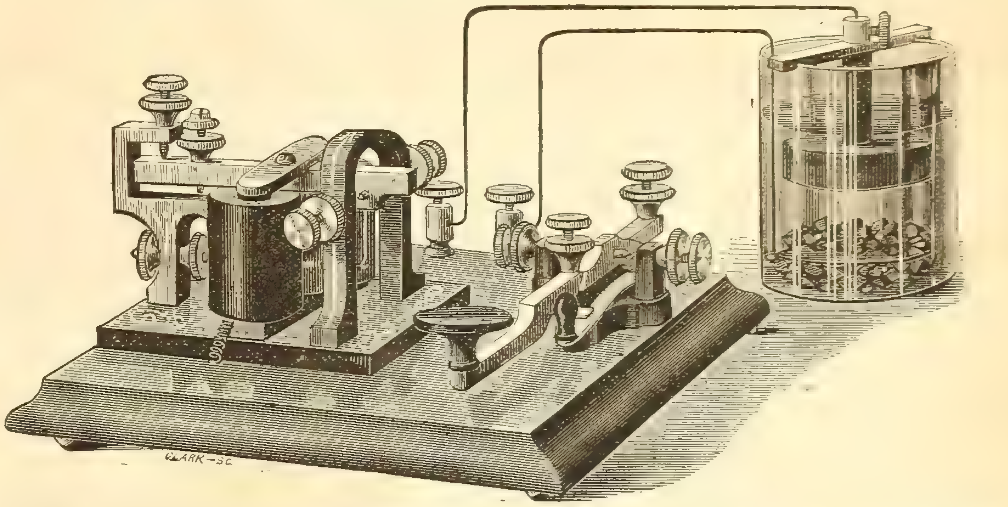

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Complete Outfit	$6.25	Money in advance	$5.00
Instrument without Battery	5.25	" "	4.20
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The Premium Learner, without Battery, sent by mail, upon receipt of			4.75
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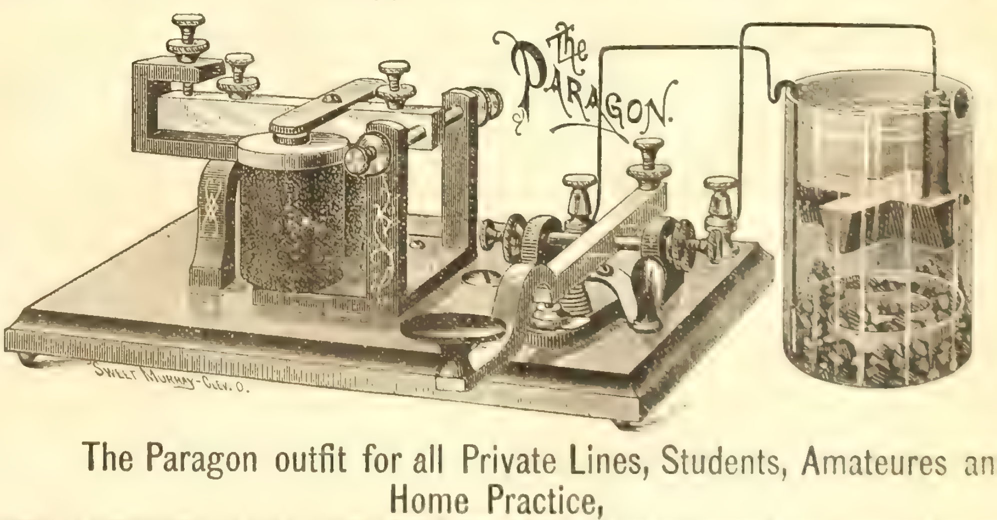
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The Paragon outfit for all Private Lines, Students, Amateures and Home Practice,

Consists of a large Sounder and Key, mounted on highly polished mahogany base and includes Battery, Chemicals, Insulated Wire and Manual, all that comprises a complete and perfect outfit ready for use.

The Paragon Instrument is WARRANTED FULLY EQUAL to the best in market for strength and quality of sound and UNSURPASSED BY ANY low priced instrument for beauty of design and perfection of workmanship and finish.

The above cut is half size and a *correct* representation of the Paragon Instrument with battery ready for use.

Paragon outfit complete,	Prices when sent C. O. D.	[illegible]	Cash,	$4.80	by Mail	$
" Instrument,	"	[illegible]	"	4.00	"	4.80
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Extra resistance or Instrument for line from one to ten miles 80 cents additional. In ordering please state length of line.

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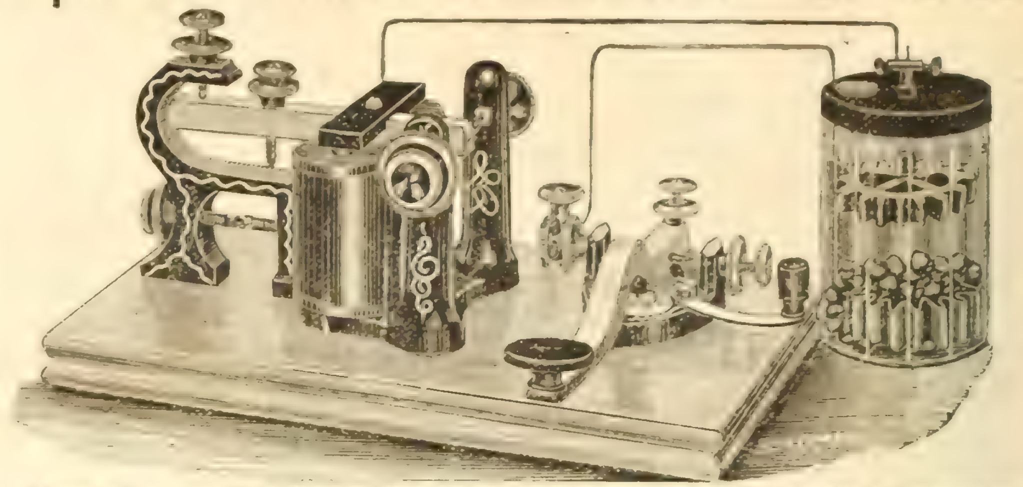

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Price, complete Outfit, including Instrument, Battery, 25 feet Office Wire, Chemicals, and full instructions for Students	$6 35,	less 25 per cent for cash,	$4.75
Battery, per cell	1 08,	" " " "	80
Instrument without Battery	5 35,	" " " "	4.00

Instrument by mail, postage paid, 50 cents extra.

Instrument by mail, postage paid, wound with finer wire for city lines 15 miles			5.25
Galvanized Wire per quarter mile (best)	$5 25,	less 25 per cent,	3.93

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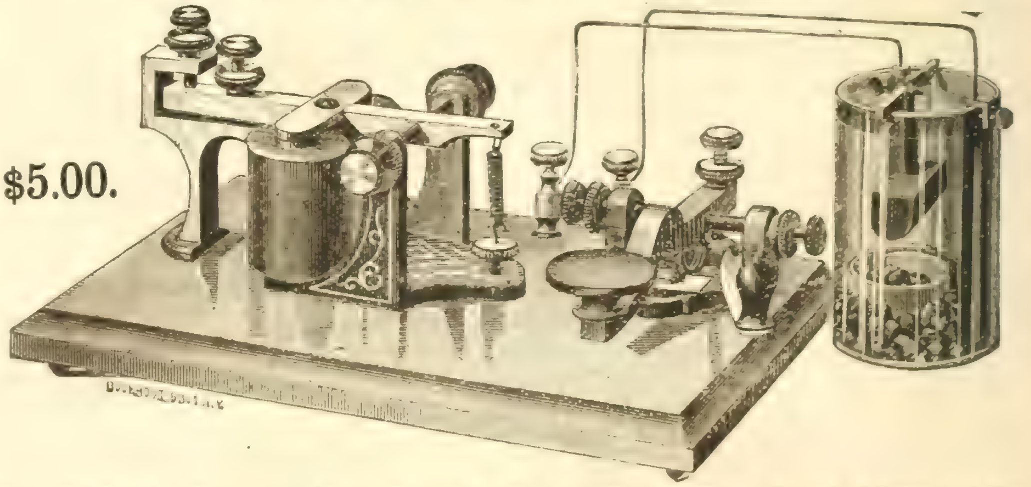

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RETAIL PRICES.—Complete Outfit as above, $6 25 less 20 per cent. for cash with order	$5.00
Instrument without Battery, $5 25 " " " "	4.20
" " " wound with finer wire for lines 1 to 15 miles, $6.25 less 20 per cent	5.00
Little Giant Battery, per Cell, $1 00 less 20 per cent	.80
Galvanized Telegraph Wire, per quarter mile, $5 00 less 20 per cent	4.00

☞ **HOME LEARNERS' INSTRUMENT** (without Battery), sent by Mail throughout United States, post-paid, $4.75. Same Instruments, wound with Finer Wire, for Lines 1 to 15 miles, by mail, postpaid, $5.50.

REMIT by Postal Money Order, or Draft, or Registered Letter.

L. G. TILLOTSON & CO.,

8 Dey Street, New York, & 54 South 4th St., Philadelphia, Pa.

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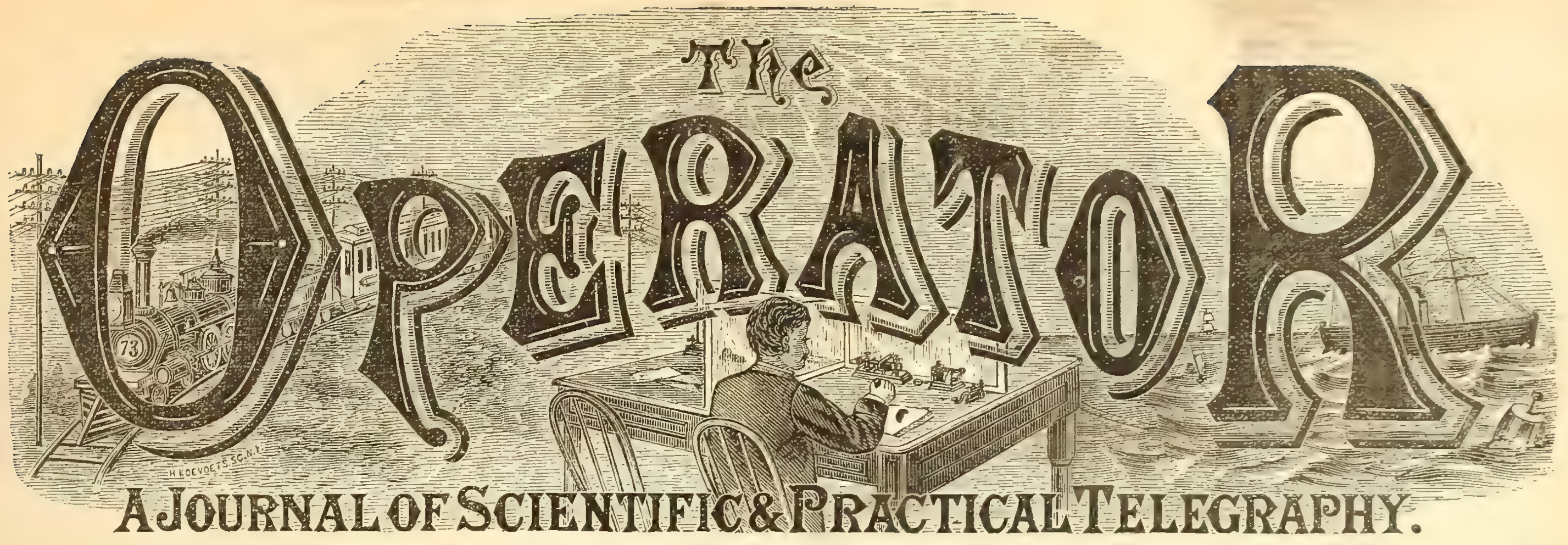

THE OPERATOR

A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

Vol. VII. NEW YORK, MAY 1, 1877. No. 5

THE OPERATOR.

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Home Learners' Instruments
Are the Best.

Sent by mail, without Battery, to any part of United States, prepaid, for $4.75. Same instruments, of higher resistance, for lines 1 to 15 miles, sent by mail, prepaid, $5.50. See advertisement in another column.

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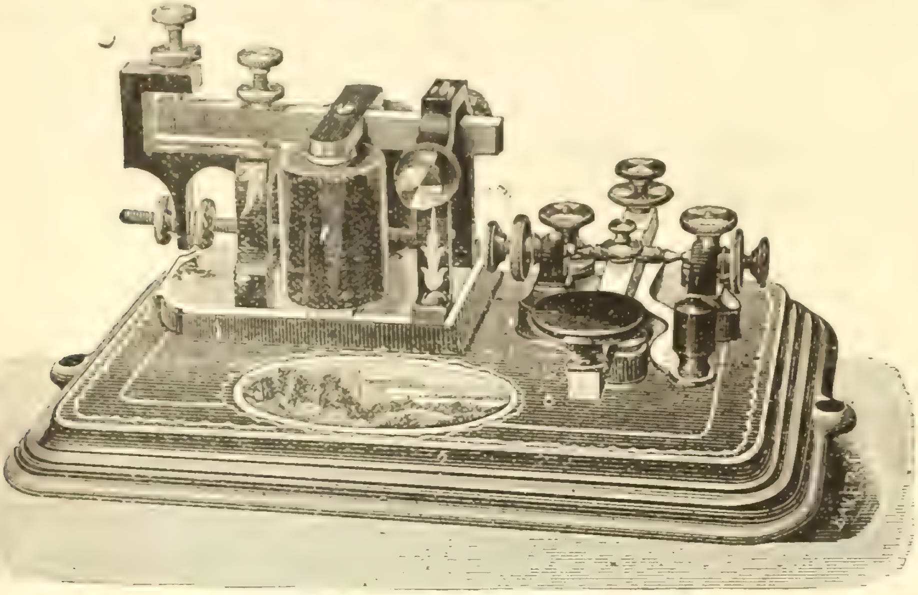

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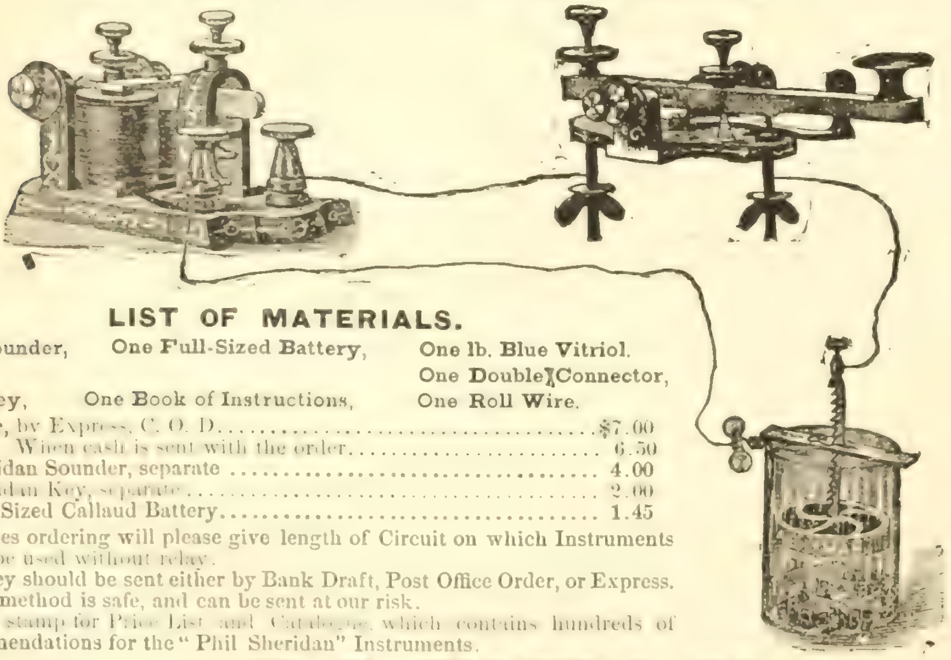

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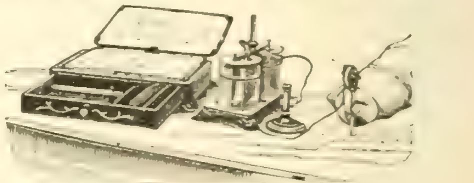

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THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

May 1st, 1877.

Volume VII. **Whole No. 77.**

My Telephone.

I fell in love with a girl out West—
Eliza Jane by name—
She said she'd make my cognomen
Addendum to the same.

As she lived West and I lived East,
This happy thought occurred:
"I'll rig a Telephone and then
Our heart-beats can be heard.

"Though plus a thousand miles divide
My castle from her bower,
And, space defied, we'll quietly
Do courting by the hour."

'Twas done; and then, for months and months,
Along the sentient wire
We sent each other messages
With voices of love's fire.

She heard my whispers—I heard hers—
And, as a wedding bell,
All things went merrily until
This accident befell:

One morning, "Liza Jane," I said,
"Meet me at eight to-night."
"I can't," she answered, "I'm engaged
To walk with Mr. Bright."

"You shan't!" I cried; "I will!" said she,
And then, O, blasted bliss!
I heard, too plainly for a doubt,
A most emphatic kiss,

Followed by that sweet gurgling sound
Which proved her free from care—
Yes, I was Telephoning here
While Bright was kissing there!

MORAL.

The listener," says the ancient saw,
"Hears nothing in his praise"—
And lovers, too, may hear too much—
These Telephonic days. —G. H. C.

* * *

The Thorsdale Telegraphs.

I.

When I first arrived at Thorsdale I was nineteen, having just graduated from a Western college, with a magnificent diploma, and, if it had not been for a knowledge of telegraphing and machine sewing, would have been assisting a widowed sister of mine, keeping school, in a town in the western portion of the State. Thorsdale then had rather a typographical than a topographical existence. While Two-boysboro and Smoodersville enjoyed the distinction of capital letters in the railroad guide, Thorsdale had to be satisfied with the smallest type. Thorsdale was simply the intersecting point of two railroads, which formed an X at that point, and for buildings had a dilapidated freight depot, a few straggling houses, and a telegraph office, in which for a certain time I was an employee. Thorsdale office had a great deal to do with railroad business, and although the two roads were at daggers drawn, and continually quarreling on the subject of time tables and schedules, messages relating to the safety and business of the trains were always being received at and forwarded from the Thorsdale station.

It was an oppressively sultry August afternoon when I first presented myself at the office, and became acquainted with Mr. Thor, its occupant. Apparently Mr. Thor did not much heed the few words of salutation I gave him, though he rose from his work and offered me a dilapidated office stool. Somewhat tired, perhaps rather confused by his manner, which, though not uncourteous, was in the highest degree indifferent, and hardly calculated to inspire self-reliance, I sat rather uncomfortably on the high chair for some minutes, wondering whether I would like a position in the Thorsdale office, and coming pretty rapidly to the conclusion that with Mr. Thor as a fellow telegrapher I should not relish it. I excused his not talking to me just then because he seemed quite busy with his instrument, studying at the same time a railroad time-table, which was pasted on the wall before him. Suddenly he turned toward me, and said, "Miss Brown?"

"Yes sir," I replied.

"M. Brown. Is M for Miranda, Mirabel, or Madeline?"

"No, sir; my name is Mary. Yours is Mr. Thor, I presume."

"Yes, Jahn," and he spelt it out for me on the instrument. "J-a-h-n—so, and not John. Are you an expert operator?"

"Not very, sir; though I have had a fair practical experience."

"So! Rather easily flustered?" he inquired, moving toward another instrument, which commenced working, and over which he was now bending somewhat attentively. Did you understand that last message?"

"No, sir," I answered, "I was not listening; I could have read it had I chosen to."

"Then you are not curious?"

"Yes, I am," I responded, by no means relishing his interrogations.

Here there was quite a pause in the conversation, two of the instruments going at once, to both of which Mr. Thor paid attention, sending back replies. Presently he said, but not at all quickly,—there was even a slight drawl in his manner of speaking,—"Here, Miss Brown, Miss Mary Brown, be good enough to send this message; I will call it off for you. Ready? 'Thor to Smoil. Certain collision on or about ninety-three mile post. Keep the up train at station, if there is time."'

I had been rather listless so far; in fact, my mind was a thousand miles from where I was seated on the high stool, but now—upsetting the stool with a crash, my hair ribbon getting entangled somehow in one of the sounders, which ribbon I tore from my head, my hair tumbling down—I transmitted in an instant the message, a great deal faster, I think, than I ever did anything before in my life.

"Correct! Miss Brown will do for an emergency. Excuse my forgetfullnes in not offering you a glass of water. The day is quite oppressive, and it is likely to storm." He poured me out a glassful of water. I took it, and looked him in the face. His countenance was imperturbable. Suddenly it flashed across my mind that it was some stupid hoax on his part, and that he was hazing a new-comer in the office. I felt enraged at this method of procedure, and instantly resented it.

"This is scandelous," I said, moving from the instrument table. "I do not wish your glass of water. To have imposed upon me with a message of this kind is singularly out of place. It is some stupid joke. The wires were disconnected, or led to nowhere, or you have told the receiver of the message that it amounted to nothing. I have no respect for—"

"Stop, Miss Brown, and watch your instrument. I fooling you? God forbid! Keep silent, and listen."

He said this very quietly, his face not exhibiting a particle of resentment, or even surprise. There was a lapse of a minute, when off went the instrument, and ticked out: "Just in time. Train stopped. Church excursion. Might have been harrowing. All right. Mamma on board. Somebody intoxicated."

"Will you have some water, now? Thorsdale water is the sweetest, coolest in the world," he said. I felt thoroughly ashamed of myself, as I turned my head aside, and gulped down the water. I was about thanking him when, seeing my confusion, he offered me his hand, and led me to a little partition on one side of the office. "Your bower," he said. I peeped into a kind of closet some six by eight, and ventured in, when he shut the door softly after me. It was the merest bin of a place, roughly put together, though there had been apparently quite a determined effort to make it look comfortable. There was a stone pitcher, a tin basin, a looking-glass, and a pretty bunch of flowers in an ale bottle. On the walls were pasted a variety of pictures, views of scenery in Norway and Sweden, taken from the illustrated papers, and occupying a whole side was a carefully drawn map of a city, with its broad streets and lanes, its public buildings and churches, with parks and fountains and boulevards, and over that again, surmounting it, was a strongly colored woodcut, evidently taken bodily from a circus-poster, of a nondescript animal, half horse, half fish.

"You can use the brush and comb with impunity," said Mr. Thor, from the office; they are immaculate, bought for the occasion with the company's money, and may be found in the inventory under the head of office furniture; likewise the looking glass. I mention this simply because it will be one of your duties to keep the accounts of the office. As I didn't know exactly how tall you might be, probably the glass is hung too high or too low. You will arrange everything to suit you. The key to the closet you will find in the soap dish. It is brown soap. Thorsdale, though bountiful in soap, is undiscriminating, saponaceously, I am afraid; and I am even forced to admit that a nailbrush fitted for a lady has been beyond our powers. The key, too, is dreadfully large, though mediæval in style. I purloined lock and key from one of our depot doors, but no amount of filing the wards would get the creak from it. Oh! I must not forget to tell you that you will please give the door a kick when you want to shut it."

To relieve my feelings, I used the brush vigorously, arranged my hair, and then looked at the flowers. When I felt that there could be no excuse for my remaining longer immured, I stepped out into the office. Mr. Thor was apparently dozing over his table. His hands supported his head, his flaxen hair streaming down over his shoulders. Even in this position, his tall stature was manifest.

"So very much obliged to you, Mr. Thor, for all those kind attentions on your part in my boudoir. They are exceedingly grateful to me; and—and I am quite distressed—very sorry—that at the start I should have made such an absurd dunce of myself, Mr. Jahn Thor; and pray tell me about that train; is it all right now?"

"Oh!" he said, rubbing his eyes, as if awaking from a dream. "It was a woman at the other end of the line, who gushed back. Now to think of a telegraph woman sending the word "intoxicated" when "drunk" would have been much better, and six letters shorter; and what does she mean by taking up my time by sending me stuff about a church train, and her blessed "mamma," just as if Providence was especially careful of church people and fond parents on a railroad? She skips letters when she is the least excited. If a cow is run over she sends me news about it, in spasms. And now she wants to know who it was sent the reply to her; she recognizes a new hand at the bellows."

I felt somewhat hurt at his having taken no notice of my apology, but I meekly replied, "I trust you will excuse my rather hasty expression."

"Miss Brown, I have no doubt that we shall get on quite pleasantly together. You know that I am master here by seniority. To-morrow is Wednesday, and mostly a quiet day; some three trains are off. You will want some rest. Probably your household arrangements not yet completed."

"Indeed they are, sir. I have secured quite a good boarding-house, and a trunk to unpack is not much."

"I shall have no use for you to-morrow, though you had better come at sundown. On Thursday you will commence work in earnest. We might as well understand one another at once, Miss Brown. The office will expect your whole time and attention; and holidays will be few and far between. Thorsdale may have its faults, but there are no barbecues, nor picnics, nor bands of hope, nor sisters of Washington, nor woman's rights, nor *fête* days, nor festivals here. Thorsdale has no time for pleasure, but works on silently, unceasingly, toward its great destiny. After a while, I do not gainsay it, may come Thorsdale's period of relaxation, but not until the arms of Thorsdale, the sea-horse, red on a white field, shall be emblazoned on the flag of this good State, and men shall give to the Thors that proud position they once assumed, a thousand years ago, in the country of the vikings. I have placed their blazon on the walls of your closet!"

I was somewhat startled at this unlooked-for vehemence on his part, and could by no means exactly understand what he meant. "Do you allude to that picture—half horse, half fish—which is tacked over some map or other, in my closet?" I asked, considerably astonished.

"Yes, I cut it out myself from a circus-poster that decorated one whole side of the depot. Of course, such an animal does not exist."

"I should suppose not," I interrupted, unable to suppress a smile.

"Though it was once carved in wood," he went on, "and was one of the ornaments of the triumphal car in which a very bold circus band made its entry into Twoboysboro. They did not honor Thors dale. I have an antique seal left me by my father precisely like it. My father was only a blacksmith, but he treasured that old seal. He told me it was centuries old, and had come down to him from his grandfather. The sea-horse is, then, our crest; I tattooed it on my arm when I was a boy. I can show you a rock overlooking the lake, where I chiseled this same device deep into the stone. There it was that my poor old father used to spend sometimes whole days, waiting for me to come home, for I was absent from him many a year. He used to tell me that our lake was like his native fiord, where he was born, and where my poor mother came from. That rock is my landmark, and it is where my wharf must start from, some of these days. Thorsdale! Thorsdale!" Just here he seemed to quite ignore my presence, and was apparently talking to himself. "Dale! dale!" he continued, "that final syllable has a diminutive sound, and is impossible when connected with the idea of anything like a city. Busy men, inclined to clip their words, would never say Thorsdale. I must drop the "dale" and call it simply Thor." Then, turning to me, he said "You would have no objection, Miss Brown, to calling this place Thor? The necessary abbreviation used in telegraphing has already inaugurated its use. It is always signaled Thor, and the new railroad-guide publisher has printed it so."

"Evidently," I said to myself, "Mr. Thor has some decidedly original ideas in regard to Thorsdale." So I replied to him not mockingly, but rather carelessly, "I had no idea you were lord of the manor. I shall be pleased to be the humblest of your vassals, and prithee call it Thor;" and I made a reverence.

TO BE CONTINUED.

An Able Review of "Lightning Flashes and Electric Dashes."

BY WERNER.

If the theory be true that our writings are the reflex of our character, the student of our manners and customs, living a telegraphic generation hence, will have a rich and varied store from which to extract his information. In comparing our representative journal, THE OPERATOR, with any of the publications written and issued by collegians at the various Universities, with their antiquated jokes and bungled-up Greek sandwiched between lumbering phrases, the vast superiority of the ever-bubbling fountain of rough but true genius over the hard-pumped and creaking handle of mere scholarship is at once apparent. We, as a distinct class, are making ourselves heard, not only over this continent, but in Europe and Australia, as is shown by the flattering foreign notices of the last book issued by our profession—John Oakum's excellent work.

A well-spring is not to be dried up by the extraction of a bucketful, hence no one is surprised at the announcement of a new book written and published by practical telegraphers. "Lightning Flashes," of which I have been accorded the privilege of reading the proofs, bears every indication of having been prepared with the greatest care and regardless of expense. The paper is of fine texture, the binding heavy and substantial and very pretty, while the profusion of illustrations—particularly the artistic productions of Mr. J. J. Calahan—are equal to the efforts of the Frosts, the Morgans and the Nasts of the outside world. It is also a refreshing sight to see so many brilliant names appended as contributors, including that of the eminent historian, Dr. Lossing, and so many names which will be familiar to the fraternity at large.

As it is not instruction so much as recreation that a hard-worked body of people need, stories written exclusively with the latter purpose would be quite sufficient; but when both objects are embraced, as in this case, it is so much the better. The story-telling is led off by an extravagant piece called "The Volcanograph," which, although a pleasant absurdity, it is not safe, in these days of wonderful inventions, to scoff at. Following this is a "Leaf of Autobiography," by Mr. Walter P. Phillips, the leader of what may now be called our school of "reflective" writers. Mr. Sanderson, of the *Pittsburgh Dispatch*, an earnest exponent of the well-known "sweet oil" process, will give many of our needy brethren a valuable lesson in [illegible]. His volubility is about equal to Tip McClosky's, and his promises are worth, anyhow, as much as old Jim Lawless'; while the excellence of John Oakum's former productions will vouch for the able manner in which Mr. Sanderson will turn these qualifications to account. There is also, farther on in the book, another of this popular author's essays called "An Evening Reverie." To the legions of his admirers who have delighted to wander with Tratton and Judd in "An Old Man's Exegesis," among the hills and vales of Massachusetts, "where the Blackstone winds brightly in the sunlight, a mere brook," the prospect of a perusal of this later production of John Oakum will be very gratifying.

Ralph W. Pope presents a very interesting specimen of the many thrilling incidents which are always, at some time or other, peculiarly our lot as telegraphers. The interest awakened by reading "$1,000 Reward—my Foot Race with a Telegram," never flags from beginning to end, while the excellence of diction and free flow of thought is vouched for by a bare mention of the author's name.

There is an excellent love-story by Charles Barnard, editor of "World's Work," *Scribner's Monthly* Although it is one of the best written pieces in the book, and the production of an "outsider," it brings credit to us in showing, by comparing our own efforts with it, how closely the unpracticed but intellectual telegraphic novice may keep up in the swift race beside the methodical and keen professional *litterateur*. Mr. Barnard's production is called "Kate," and is accompanied by four first class illustrations. The description of engine No. 59 and John Mills, its driver, is a masterly description of the sympathy existing between the animate and inanimate, while the technical knowledge and pure English composition introduced is very fine. The story of this noble fellow, Mills, and his love-suit with the operator, Kate, is strikingly romantic; and after Kate has run off through the snow to flag an approaching train, thereby saving the lives of a large party of officials with their families; and when the gruff old president is brought upon the scene, one wishes that we were all railroad presidents. The lusty engineer, Mills, tells the story of Kate's devotion and bravery, cap in hand, while the blushing girl hides herself in the background; and when the recital is over we all desire to shake Mills' brawny hand, and cheer with the brilliant company, for: "The president actually kissed her—for the company. A real corporation kiss, loud and hearty."

"Some Grave Thoughts," a fine soliloquy, by W. J. Johnston, which attracted considerable attention in a recent issue of THE OPERATOR, is republished in the book. "A Centennial-Telegraphic Romance' also by Mr. Johnston, abounds in lively sayings and romantic incidents. It illustrates the old saying, that the course of true love never did run smooth, but all comes out well in the end. Young men who are in the habit of calling on their fair charmers at their homes, and are compelled to waste the evening in talking politics with her "old gentleman," or in vain endeavors to prove to the stubborn parents that all old folks ought to retire to bed every evening at 7:15, will find that this story meets their views exactly. To the married ones it will bring recollections of pleasant escapades almost forgotten.

Chops' "Carnival of Oshkosh," published in THE OPERATOR last year, is now republished complete in the book, with three excellent full page illustrations by Mr. Calahan.

Oney Gagin gives an interesting account of the trials and tribulations of his brother Leander as a political investigator during the late election. Nuf Ced follows with a charming little love story, "Wives for Two, or Joe's Little Joke." Ruddy contributes a story of early telegraphic life in Connecticut; George H. Bliss, of Chicago, has two excellent little western sketches, "Scrapes," and "Snags." The Pacific Coast is represented by a story from the pen of J. A. Clippenger, author of "The Pedagogue of Widow's Gulch," and "Hold Hingland" sends in her mite in the shape of a thrilling and very interesting story entitled "Perilous Christmas Courtship, or dangerous Telegraphy," by the author of "Was She Wrong," published some time ago in THE OPERATOR. Many other articles which are being set up at the time I write, promise to be as interesting as any of those already mentioned.

The original and inimitable Yosef relates in queer Dutch phrases his "Oxberience mit dat Railroat." After hiring himself out as a first-class railroad man he receives his first train order by wire, to flag and hold a certain train, and after innumerable breaks the dispatcher drums it into Yosef's head that he is to display a flag as a signal for the rapidly approaching train to stop. Yosef, who is "putty vell oxsited" by the novelty of the situation, looks on in mute astonishment as the said train whirls at full speed past his waving flag, the engineer merely calling out to Yosef to "Hoald der Fort," but showing no disposition to stop. His "oxcited" explanation to the dispatcher, by wire, is a side-splitting narrative; and when asked by that official whether he used a green, a red, or a white flag, his innocent reply, "No, der American flack," is uproriously funny. Yosef is always at home as a philosopher, and his concluding remark, on finding himself unable to adjust for the concluding sarcastical remarks of the dispatcher—not to speak of the fate of the train that went by—is a good illustration of the working of our cheap labor system: "So I cuts me owet, and putty soon I skint owet minezelf, but I doant vas heardt of in doze barts zince."

As an antithesis to Yosef's style is "The Telegraph Dispatch; a story of telegraphy in the early days," by Mr. J. D. Reid. This affecting sketch can be read with interest by operator, lineman, or messenger, or the general public, as it deeply concerns all, and in the cultured and refined style of its well known and popular author it conveys a wholesome lesson to both patrons and employes of the telegraph. Men of Mr. Reid's experience and practical education have no right to remain unheard from. They sometimes, it is true, favor us with an excellent essay, but it is like throwing a sprat to a whale—we want more, and they should give us more. Besides, these revered and truly representative "old timers" are too precious to be permitted to pass away in silence, and to carry with them what is not exclusively their own, but partly our property, namely: our early history.

"The privilege of enlightening us on this subject has in this case been ceded to a non-telegrapher, Benson J. Lossing, L.L D., but the subject, "Professor Morse and the Telegraph," is admirably treated. The historian introduces us to S. F. B. Morse at the age of 19, and in his peculiarly able manner reviews the immortal professor's life. There are many illustrations in this article, including the first recording instrument, Morse's home at Poughkeepsie, and his portrait. The entire article is exceedingly interesting to telegraphers, and at the present day, when war is proclaimed, treaties are ratified and death sentences commuted by telegraph, we can afford to smile at the old-fashioned way of doing business only thirty-three years ago, as recorded by Dr. Lossing: "The first public messages sent were a notice to Silas Wright, in Washington, of his nomination to the office of Vice-President of the United States by the Democratic Convention, then (May, 1844) in session in Baltimore, and his response declining it. Hon. Hendrick B. Wright, in a letter to the author of this sketch, says: 'As the presiding officer of the body, I read the dispatch; but so incredulous were the members as to the authority of the evidence before them, that the Convention adjourned over to the following day, to await the report of a committee sent over to Washingtan to get *reliable* information on the subject.'"

There are some excellent points made on abuses which have always rancor'd in the service, and in vigorous Anglo-Saxon, too; but as these aggressive writers generally know whereof they speak, it is useless to object to their deductions, since "kicking" against their lectures is similar to kicking a can of nitro-glycerine. Policemen, some chief operators, linemen, and other ingenious and highly successful devices for keeping stoves warm in winter time, are ably discussed. That delectable vagabond, the "Great American Traveler" (his doctrines yet have many disciples) is also well ventilated. For downright solid loafing—taking a year's job, at big pay, day and night, as a criterion—commend me that loud-mouth'd operator who boasts of having "worked" in thirty-four States of the Union; but his race is nearly run.

Time was when this knight errant lived absolutely in clover, hanging around a saloon when he was not in the office or essaying the feat of traveling between New York and New Orleans on three cents. He was always ready to dance with a jolly party, to join in a jovial chorus, to sympathize with a recently-discharged comrade, or drink beer at somebody else's expense; but his day has come, and patient toil and unquestioning obedience when duty calls are now set down as prime considerations in the character of a first-class operator. A hostile combination has beset the Great Traveler—"corral'd" him, as he would say himself; and finding that he cannot break its bonds—finding his last hour approaching, bankrupt in reputation, ability, and purse—he slings his traditional bundle over his shoulder and seeks some quiet railroad station, to die; and, for want of a more appreciative audience, he sings to himself his old litany of the "golden" days, when discipline was unknown, and when nobody "broke" and nobody "stuck."

Still another class are well portrayed in the new book—the plugs. This subject has been widely discussed of late, but there still seems to be a gross and very unjust misapprehension of the term, the tendency being to class all operators who are not in perpetual "trim," under that generic and obnoxious title. This fallacy should be dissipated, and "Lightning Flashes" will do much toward that end, as our talented entomologists have been led to study the real animal scientifically. The term cannot justly be applied to that bright array of learners who will some day be the great lights of our craft; nor to those whose duties do not keep them in continual telegraphic practice, yet whose intellectual abilities are possibly superior to the mental caliber of our boasting saltomaniacs; nor yet does the term apply to any man who does a necessary amount of breaking in preference to that amount of reckless guesswork. The genuine animal is a downright "stick-in-the-mud," since a stake in the ground is obviously a "plug." The term applies properly only to the "Jonahs" of our own or any other profession—blundering unlucky wights who are born Jonahs, continue to be Jonahs in whatever enterprise they may embark, and are destined ultimately to be thrown overboard by their indignant shipmates, like the original Jonah. Jonah is always in a storm. It may be either his misfortune or his fault, or both—this is no occasion to argue that point—but certain it is that whatever vessel Jonah takes passage in is buffeted and tossed by the mad waves until the able seamen heave him overboard. This apparently inhuman process is, however, of very little consequence to Jonah, as he never dies. The traditional whale—generally some California philanthropist boasting a scriptural *nom de plume* about as antiquated as Jonah's own cognomen—rescues him; but, in turn, gets very sick of him, and spouts him out among some opposition dry-land animals, and he is soon found, blooming as ever, aboard some other ill-starred lugger—in a raging storm, of course.

With the example set forth above, some few—but happily *very* few—of our number must expect to be surprised. Here and there a culprit will stumble across a well-merited rebuke, or an economical official may take it into that part of his body called, by official courtesy, "his head," that a particular variety of cap fits him; and, in all truth, some of the polished sarcasms, although just, are very bitter. But the barbed shaft strikes such hard material, and always from such an unexpected quarter, that the thick-hided victim would fain go on his way without squabbling about it, since in tarrying to argue the point he is liable to be worse peppered than ever; and, as even the most stubborn man acknowledges his total inability to run away from his own shadow, the victim, if he truly comprehends the situation, will find his greatest "hold" to be in genuine efforts to reform, in which every good man will stoop to help him.

One of the prominent merits of the book is that, true to its name, "Lightning Flashes," you never see the bolt coming. You read straight ahead, sympathizing meanwhile with one or other of the numerous heroes, with big tears in your eyes, when the joke is "sprung" on you. True again to its name, it whirls you on to other transitions and perplexing whimsicalities, nor stops it to mark the pates that were cracked by the last boomerang. The wit is, very properly, held well in hand by deep thought; there is remarkably little of the old cut and dried "humorous" business, and all the incidents are felicitous, even if sometimes improbable.

Wire Tapping that was very Successful.

One of the neatest and most daring express robberies we have recently heard of was perpetrated at Pittsburg, March 13th. An ex-operator, calling himself Brooks, tapped the wire of the A. V. R. R. at a point a few miles from Templeton, and with the aid of a pocket instrument inquired of the operator at Parker City the name of the express messenger in charge of the Buffalo express south train, giving the signature of Superintendent Bingham, of the Union Express Co. The train had passed Parker, the operator had seen and talked with the messenger, and was therefore prepared to reply, which he did. The message could not be read at Pittsburg, Brooks having grounded that end of the wire. Brooks then sent a telegram to Thomas Bingham, the express messenger, whose name he had learned from the Parker City operator, which instructed him to transfer his packages, etc., to J. H. Brooks, at Templeton, and return to Parker's Landing, and await orders. This was dated Pittsburg, and signed "George Bingham, Superintendent." Brooks next "straightened" the "wire," and hastened to Templeton. Stepping into the car he inquired for Mr. Bingham, and said that he was ordered to relieve him, producing a telegram addressed J. H. Brooks, signed "George Bingham, Superintendent," to that effect. The transfer was made, and Brooks proceeded to Pittsburg in charge of the train, Mr. Bingham telegraphing his uncle, the superintendent, in Pittsburg, "O. K.," will report at Parkers, and signing his own name. This message was duly received in Pittsburg, but the express folks do not seem to have considered that there was anything wrong. The train subsequently arrived at Pittsburg, with Brooks in charge of the express car. The goods were checked off correctly, and Brooks got into the wagon, but before reaching the express office managed to open the safe, and make off with money to the amount of somewhere between four and ten thousand dollars. He jumped from the wagon when less than half a block from the office, and so far the detectives have been unable to get any trace of him.

Brooks was certainly a very smart fellow, but we fear got credit for more than he deserved. For instance, a Cleaveland detective, on a visit to St. Catharines, during a conversation with one of the local detectives in the express office next door to the telegraph office, referred to the Pittsburg robbery, and quite astonished the operators who heard him by assuring the astute St. Catharines officer that Brooks was such a good operator that he would climb a pole and read what was being transmitted over the line by merely placing his ear against the wire! Sometimes we used to doubt the wonderful achievements of Jim Lawless, Tip McClosky, and other of John Oakum's characters, but their exploits were mildness itself compared with those of Mr. Brooks, if we are to credit the Cleaveland detective.

An Amusing Practical Joke.

Ed. Armstrong, Superintendent of the Suburban Telegraph Company of Cincinnati, was on a visit to Chicago a couple of weeks ago. On his return he reported that he had made arrangements to test the telephone between the two cities. The music of a brass band at Chicago was to be transmitted over the wires and distinctly heard in Cincinnati. Out of courtesy to the newspaper fraternity, it was announced that none but members of that profession would be admitted to the first trial. When the time came thirty newspaper men were present, pencils and all. It took Mr. Armstrong some time to adjust things properly, but finally sweet sounds were heard. Musical critics, reporters and editors placed their ears close to the relay and could not conceal their joy. "I hear the telephone whir," said one; another threw his hat in the air with delight, while the remainder fell upon each other's necks to weep. Presently one of the party said he could distinguish the French horn from the bass drum, another thought the fellow playing the trombone was blowing too hard to make artistic music, another could count just sixteen pieces in the band while still another counted seventeen. Everybody listened and drank in the delicious strains. Finally the music abruptly stopped. As they all wanted to examine the telephone to its bitter end, Mr. Armstrong lifted the top of the relay box and disclosed a little Swiss music box, which on being wound up struck up "A Life on the Ocean Wave, A Home on the Rolling Deep." The faces of the astute newspaper men very visibly lengthened as they contemplated what a complete sell had been perpetrated upon them. It is presumed that Mr. Armstrong properly appreciated the fun. He had just graduated in the same school at the hands of Mr. Summers at Chicago a few days before. Some of the reporters felt quite blue over the sell, as a number of them had been studying scientific works on the transmission of sound for weeks, and had several columns of introduction in advance, which was already in type.

Permanent Exhibition at Philadelphia.

The International Exhibition Company of Philadelphia intend opening a permanent exhibition in the Main Centennial Building, May 1st, 1877. Everything is to be fitted up in princely fashion, and it is hoped that the affair will be a grand success.

The telegraph department comprises, in addition to excellent facilities for commercial business, a complete fire alarm, and special police and patrol systems for the protection and government of the building, as well as numerous special wires equipped with printing telegraph instruments, automatic signal instruments, bell magnets, etc., to facititate communication between the offices of the various members of the bureau of management. By direction of Mr. Wm. J. Philips, President of the A. D. T. Co. of Philadelphia, and telegraphic director of the International Exhibition, this department has been placed under the supervision of Robert P. Manly, C. E., who held a similar position during the "centennial" exhibition. The telegraph office is situated in the Department of Public Comfort, at the southern or Elm Avenue entrance to the building, and has a choice location because of its proximity to both concert stand and the art gallery. It has been tastefully and comfortably fitted up, and will be managed by Miss Clara A. Deisher, formerly of Lake City, Fla., who will have under her control direct wires of the W. U., A. and P., and P. R. & P. Co.'s and the local wires of the A. D. T. Co. The exhibits in the electrical department are as yet in a chaotic state, but it is expected that there will be an exhibit of instruments, etc., illustrating the discoveries and improvements in the application of that science to telegraphy since the days of Morse; of them more anon. MY PLARN.

Kindness Over the Wire.

BY BILLY.

Never be rude or unkind over the wire. Everybody has an ungentlemanly or an unladylike side to his or her character, and no person has a better chance to show it than a telegraph operator. Let kindness stay your hand when you are placing it on the key to tell that young operator that his writing sounds very much as if a frantic spider were jumping on the key. Doubtless he was doing his best; and you must remember that you were once what is vulgarly called a "plug" yourself. Speak a few kind words instead. Make him feel that some one is watching his progress, and anxious to know that he improves. It will cost you nothing, and may do him a world of good. Don't hesitate to give a few minutes, when you have them to spare, to the paper operator who is trying to learn to read by sound. Remember how hard it came for you to make words, and finally sentences, of the rapidly-written letters. "Put yourself in his place," and ask yourself if you could do any better with his amount of practice. Perhaps you learned more readily, but if he is stupid there is all the better chance for you to prove your kindness of heart and good-will toward him by writing very slowly and carefully. When you have called an operator to receive a message or answer a question, don't fail to say G. M. or G. P. M., according to the time of day. If you do not write very smoothly he will not forget your kind greeting, and will be disposed to excuse your poor sending.

Don't forget to thank your informant when you have received an answer to a question. However slight the trouble of answering, remember he has conferred a favor, and treat him accordingly. Politeness pays, as the Irishman said when he bowed to a cannon ball and it passed over his head. I know of no better place to practice the Golden Rule than in a telegraph office.

The Safe Way.

The wife of a man living near Topeka, Kansas, reached Detroit on her way home from the East yesterday, finding herself short of funds, having lost $35 at Niagara Falls. She went to a hotel and telegraphed her husband to forward her $30 at once. He isn't the kind of a man to rush headlong into any financial enterprise, and he stopped to find out the cost of telegraphing money. When he had ascertained, he waited till night and sent a half rate message, saying that he would forward the money by mail. This wasn't entirely satisfactory to a wife paying three dollars per day for board, but she had to wait. In about three days the husband's letter arrived, and the wife was so mad that she came near swallowing her false teeth. The husband had inclosed the one-half portion of three different ten dollar bills, and explained in his letter:

"If these reach you safely I will forward the other halves upon receipt of a telegram."

The way that little woman [illegible] over to the telegraph office and [illegible] the [illegible] operator wonder if she was [illegible]. Over half the money will be [illegible] by the time she gets it, and [illegible] is what [illegible].—Detroit Free Press.

THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

May 1st, 1877.

WERNER'S review of the new book, on page four, will amply repay careful perusal.

GENERAL ECKERT has just returned from a visit South and West. He was looking, we presume, for more world's to conquer.

THE rates for cable dispatches to England, now that the two companies have consolidated, are seventy-five cents a word. "I told you so!"

WE expected a portrait of Mr. F. W. Jones, assistant manager of the Chicago Western Union office, for this issue, but it did not arrive in time.

THE A. and P. Company is doing so lively a business that it feels the immediate need of a number of first class operators. See advertisement on first page.

A THIRD edition of "Oakum Pickings," in paper covers at 75 cents a copy, has just been issued. So desirable a book at so low a price deserves a large sale. See advertisement.

WARS and rumors of wars in Europe. Hunt up your geography, intelligent press men. Some of the names that you will shortly have to worry through are "perfectly awful."

EDITORS are supposed to know everything. And here comes the intelligent editor of the New York *Leader* with the conundrum "Is there any telegraph paper in New York?" The idea!

LAUGHTER is the very best and certainly most agreeable medicine in the world to take. Send for a copy of "Lightning Flashes," and you will be sure of a good hearty laugh for months to come. Only $1.50.

The telegraph lines between Roumania and Turkey are interrupted.—*Cable Dispatch.*

HERE, now! we object to this thing right here. Do all the fighting you want, but let the telegraph alone. We're tired of having the wires cut every time there's a war.

CLUBS FOR THE OPERATOR.—We would remind our friends that the present issue offers an unusually fine opportunity of securing subscriptions for the paper and orders for the books. A sample copy of the present issue is sent to almost every office in the country where we have not already subscribers. If you have tried before, and failed, make another effort now.

WE commence in this issue the publication of an excellently written and highly interesting serial story of Western telegraphic life called "The Thorsdale Telegraphs," which all should read. The story will probably run through four or five issues. New subscribers, by having their subscriptions in before May 15th, can have the story complete. If you neglect subscribing in time, don't blame us because we may not be able to supply the numbers containing the story complete.

THE A. & P. ANNUAL MEETING.

The annual meeting of the Atlantic and Pacific Telegraph Company was held at the Executive offices, 145 Broadway, on Wednesday last, April 25th. About 103,600 shares were represented. From President Eckert's report we learn that the gross earnings of the consolidated companies during the year 1876 were $870,570.28; gross expenses, $831,341.83, leaving a profit of $39,228.45. Compared with 1875 this is an increase in receipts for the year of $167,496.89, or 23 8-10 per cent. The number of messages sent during the year was 2,019,533, an increase of 412,139, or 25 7-10 per cent over the number transmitted during 1875.

The following balance sheet shows the financial condition of the company at the close of the year, as stated in General Eckert's report:

Net assets, as per statement Dec. 31, 1875	$106,000.70	
Subscriptions to stock allotments	233,874.00	
Business receipts (omitting Franklin for first four months)	761,479.17	
Interest and dividends on stock of other companies, owned	2,463.03	
Total		$1,103,816.90
Operating expenses, (omitting Franklin for first four months	$726,718.69	
Automatic system and various patents	180,919.91	
New equipment, property and supplies	26,477.06	
Construction of new lines	119,964.63	
Domestic Telegraph Co. stock	1,250.00	
Atlantic & Pac. Tel. Co. stock	105.14	
Profit and loss:		
Settlement with Union Pacific Railroad Co. $4,285.12		
Franklin Co.'s debt 58,239.24	62,524.36	
		$1,117,957.79
Net liabilities, Dec. 31, 1876		$14,140.89

Following is the balance sheet for Dec. 31, 1876:

ASSETS.

Construction		$10,549,137.96
Equipment	$56,647.19	
Office furniture and fixtures	35,103.89	
Stationery	8,760.75	
Battery	12,456.01	
Line material	11,852.43 —	124,820.27
6,290 shares Franklin Tel. Co.'s stock		629,000.00
35,850 shares Atlantic & Pac. Tel. Co.'s stock remaining in treasury		3,585,000.00
Stock of other telegraph companies		27,504.14
Patents		214,919.91
United States five per cent bonds		47,500.00
Cash on hand and due from sundry persons		149,157.76
Total		$15,326,039.04

LIABILITIES.

Capital stock	$15,000,000.00
Net earnings	115,240.39
Due sundry persons, offices, and companies	210,798.65
Total	$15,326,039.04

During the year new lines were constructed from Albany, N. Y., to Springfield, Mass.; Boston, Mass., to Wells River, Vt.; Boston, Mass., to Portland, Me.; Chicago, Ill., to Peoria, Ill.; Chicago, Ill., to Davenport, Ia.; Cincinnati, Ohio, to St. Louis, Mo.; Cincinnati, Ohio, to Louisville, Ky.; Omaha, Neb., to Kansas City, Mo.; also a number of shorter lines, making, in all, additions to the lines of the company during the year, of 1,089 miles of poles and 2,078 miles of wire. At the close of the year the company and its connections comprised 17,759 miles of poles, 36,014 miles of wire, and 1,757 offices. Connections have been made during the year with the Dominion Telegraph Company, from Boston to Montreal direct, with the telegraph systems of the Baltimore and Ohio, Pennsylvania, Northern Central, Philadelphia and Erie, and Grand Rapids and Indiana Railroad companies, and with the Hawkeye Telegraph Company of Iowa, and the Western Telegraph Company of Illinois. Negotiations are pending with other companies, with a prospect of favorable conclusion. Full assurance has been received from the Direct Cable Company that the latter will not amalgamate with the Anglo-American, and that the relation between the Direct Company and the A. & P. will remain unchanged.

At the annual meeting, April 26, 1876, it was proposed to increase the capital from $10,000,000 to $15,000,000. This was ratified May 6 and the stock issued. May 9, 20,000 shares of new stock were offered to stockholders at $20 per share; 14,279 shares were issued during the year. Since then the 5,721 shares remaining of that 20,000 and 20,000 additional were sold to stockholders at $20 per share. The amount thus derived, says the report, together with subscriptions which are coming in from many quarters from parties desiring the extension of the A. & P. lines to their vicinity, will enable the company to complete the extensions recommended and approved by the Board. The report continues:

It should be considered that we only began to receive the benefit of most of the new lines constructed during the year at its close; that every possible obstacle to our extension of lines and secure establishment of business has been interposed against us, even to the willful destruction of our lines and property, by rival interests in several different localities; that in almost every office we have desired to establish and every contract or business arrangement we have sought to make, it has been necessary to bid against an influence which has been ready to submit to almost any terms rather than permit us to succeed, greatly increasing our expenses. It should also be considered that our earnings throughout the year have been derived under a succession of reductions in rates, averaging nearly one for every month in the year, all the benefits of which we could not hope to secure within so short a time. These reductions have been carefully calculated, and have, without exception, proved a benefit, in additional business and receipts.

The returns for January, February, and March, 1877, as compared with the same months for 1876, show a gain of 231,232 messages, (exclusive of press and market reports), and $59,709.92 in money, being a gain of 79 per cent in messages, and 32 8-10 per cent in receipts. A corresponding increase throughout the year, not estimating the business to be derived from new lines in progress and from additional connections under negotiation, will afford a gross business in 1877 of over 3,000,000 of messages, exclusive of press and market reports. With new lines now being constructed throughout the Southern States and elsewhere, and such progress in other respects as we have every reason to anticipate, I have no doubt a much better result will be attained, for the whole year 1877, than is indicated by the foregoing comparisons.

In answer to inquiries which have lately come to me from several of our stockholders, it is proper to state that, in the construction of the new lines we are now building, and in those built last year, we have used selected chestnut and cedar poles, the best of glass insulation, and wire of superior quality. The wire has been manufactured by the Messrs. Roebling, of Trenton, N. J., who, for several weeks past, have been making and shipping for us 100 miles per day.

In conclusion I will say that the progress of your company during the year 1876, in the extension of its own lines, the perfection of its organization and system, in its contracts of connection, in the development of its business, and its growth in public favor, has been very gratifying, and that its future success appears to me assured.

Respectfully submitted.

THOMAS T. ECKERT, President.

The following trustees were elected for 1877: Fred. L. Ames, Elisha Atkins, Benjamin E. Bates, A. B. Chandler, F. Gordon Dexter, Sydney Dillon, G. M. Dodge, Thomas T. Eckert, Jay Gould, C. K. Garrison, C. P. Huntington, H. J. Jewett, Jas.

K. Keene, Christopher Meyer, J. H. Mortimer, G. G. Sampson, Russell Sage, W. J. Syms, Henry M. Taber.

For the benefit of the readers of THE OPERATOR, we have compiled the following comparative table of the business, etc,, of the Western Union and A. & P. companies for the years 1875 and 1876, which we think will be found very interesting just at this time:

	WESTERN UNION.		ATLAN. & PAC.	
	Calender Year ending Dec. 31st,			
	1875.	*1876.*	*1875.*	*1876.*
Receipts.....	$9,821,748.36	$10,048,997.81	$386,826.97	$870,570.28
Expenses....	6,602,953.88	6,611,947 47	396,399.75	831,341.83
M'sgs sent...	17,966,479	19,446,697	1,607,394	2,019,533
Miles of line.	73.317	77.092	15,289	17,759
Miles of wire	182,102	191,994	30,253	36,044
No. of offices	6,759	5,252	1,426	1,757
Capital stock..........	$41,073,410		$15,000,000	

It will be seen from the above that the A. & P. Company, notwithstanding the sweeping reductions and the bitter opposition of its rival, is making very satisfactory progress. Business all along its lines has recently increased in a very gratifying manner, and it has already been clearly demonstrated, we are informed, that the 25 cent rate leaves a satisfactory margin for profit. The A. & P. wires are now being worked to their utmost capacity. In all directions business seems to have taken a sudden start. The New York and Boston duplex averages 100 messages an hour (50 each side), the Buffalo and Chicago duplex 80 an hour (40 each side). The A. & P. officers are extending the facilities of their company, and pushing forward new lines with commendable energy, and deserve all the success which has attended their efforts. If the company continues to grow and prosper for a few years as it has during the last two, it will prove a very formidable rival indeed for the Western Union.

About the Operator.

We send to-day sample copies of THE OPERATOR to a large number of offices in which we have at present no subscribers. We want them to examine the paper, and if possible become subscribers. THE OPERATOR is now the only independent telegraphic publication—the only paper devoted to the interests of telegraphers in the country, and, as such, deserves the encouragment and support of the entire fraternity. The paper is fighting the battles of the fraternity single handed and alone against heartless, grasping monopolies, whose only aim is to keep salaries down, and enrich themselves by trampling upon the rights of their overworked and underpaid employés. We do not complain of the patronage accorded the paper, and yet we might have a larger number of subscribers than we have. The larger number of persons the paper represents, the more influence will it possess. We think you will find the paper interesting. It is certainly not expensive about ten cents a month, a sum which every one ought to be able to afford. Now won't you give us your encouragement in our efforts to improve the condition of operators, by sending in your subscriptions, and working for the circulation of your representative paper. The subscription price is only $1.25 a year. If you do not desire to subscribe for a year, we will send you THE OPERATOR prepaid every issue until January 1st, 1878, for eighty five cents. Or THE OPERATOR and a copy of "Oakum Pickings," both prepaid, for $1.50. This is certainly cheap reading. Send in your order at once, and secure the continuation of the interesting story, "The Thorsdale Telegraphs," commenced in this issue. If you delay, you may not be able to get the story complete. See instructions how to subscribe, page 11.

A New Feature.

With a view of making THE OPERATOR instructive as well as interesting and amusing, we have just completed arrangements with Mr. Henry Van Hoevenbergh, electrician of the A. & P. Co., for a series of illustrated scientific articles, which we are certain will be very acceptable to the fraternity. The articles will be written in language so plain and practical as to come within the reach of the veriest learner, and with numerous diagrams and wood-cuts will be made so interesting that instead of a task the reader will find it a pleasure to study them. The first of these articles will appear in our next issue, there not having been time to prepare wood-cuts in season for the present number.

In this connection we would say that Mr. Van Hoevenbergh will take pleasure in answering any questions relative to electricity and telegraphy that may be asked, likely to interest the general reader. We want to have a column of questions, and answers every issue, and the more inquiries received, the better pleased we shall be. As the scientific department is under the charge of Mr. Van Hoevenbergh, all questions relating thereto should be addressed to him at 145 Broadway.

Letters from Europe.

THE editor of THE OPERATOR intends visiting Europe during the coming summer, partially on business and partially on pleasure. He thinks of starting on Saturday, June 2d. During his absence the paper will be under the editorial charge of a gentleman well known to the fraternity, and fully competent to satisfactorily discharge the duties of that office, who will endeavor to make an even better and more readable and spicy paper than we have done.

Mr. Johnston during the trip will visit the principal cities in Great Britain, and perhaps on the Continent, such as London, Liverpool, Glasgow, Paris, etc., and send for publication letters each issue to THE OPERATOR, discussing telegraphy in Europe from an American point of view. These letters, it is hoped, will be of considerable interest to American telegraphers, and prove a pleasant feature of the paper during the coming summer.

Lightning Flashes and Electric Dashes.

A very fine review of Lightning Flashes, by Werner, will be found in another part of this paper. We advise every one to carefully read it. The book cannot fail to please every variety of taste. There are more than a score of contributors—all the very foremost writers in their particular department. The price is only $1.50 a copy, and where three copies are ordered they will be sent postage prepaid for $3.75. Get two of your friends to join you and order three copies at once, or failing that, at least send for one yourself. We will send Lightning Flashes and THE OPERATOR until January 1st 1878 for $2.25, Lightning Flashes and Oakum Pickings $2.00.

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MR. R. A. EMPEY'S "Deep, Dire, Dreadful Tragedy in Four Acts," is republished to-day, for the reason that we think it good enough to warrant it, and because we have no other illustration small enough to put in its place, and no room to publish larger ones.

Themes for the Thoughtful.

As you receive the stranger so you receive your God.

There is no service like his that serves because he loves.

Silence is wisdom, where speaking is folly, and always safe.

To-morrow is the day on which idle men work and fools reform.

Whenever you find Humor, you find Pathos close by its side.

To have ideas is to gather flowers. To think is to weave them into garlands.

They that do nothing are in the readiest way to do that which is worse than nothing.

A thousand evils do afflict that man who hath to himself an idle and unprofitable carcass.

Combat all thy discontent through prayer, every care through faith, every fear through hope.

Dewdrops at night are diamonds at morn; so the tears we weep here may be pearls in Heaven.

That man who lives in vain lives worse than vain. He who lives to no purpose lives to a bad purpose.

A moral in the style of Seneca:—It is better to do the idlest thing in the world than to sit idle for half an hour.

A vain man is a nauseous creature; he is so full of himself that he has no room for anything else, be it ever so good or deserving.

Since the generality of persons act from impulse more than principle, men are neither so good nor so bad as we are apt to think them.

When our souls shall leave this dwelling,
The glory of one fair and virtuous action
Is above all the scutcheons on our tomb,
Or silken banners over us.

It is easy in the world to live after the world's opinion; it is easy in solitude to live after your own; but the great man is he who, in the midst of the crowd, keeps with perfect sweetness the independence of solitude.

As the deepest hate may spring from the most violent love, so the greatest ingratitude may arise from the largest benefits. It is said that Cicero was slain by one whom his oratory had defended when accused of his father's murder.

Love may exist without jealousy, although this is rare; but jealousy may exist without love, and this is common, for jealousy can feed on that which is bitter no less than that which is sweet, and is sustained by pride as often as by affection.

Joy wholly from without is false, precarious and short. From without it may be gathered, but, like gathered flowers, though fair and sweet for a season it must soon wither and become offensive. Joy from within is like smelling the rose on the tree; it is more sweet and fair, it is lasting, and, I must add, immortal.

It has been remarked that almost every character which excited either attention or pity has owed part of its success to merit, and part to a happy concurrence of circumstances in its favor. Had Cæsar or Cromwell exchanged countries, the one might have been a sergeant and the other an exciseman.

Though thou seest another openly offend, or even commit some enormous sin, yet thou must not from thence take occasion to value thyself for thy superior goodness, for thou canst not tell how long thou wilt be able to persevere in the narrow path of virtue. All men are frail, but thou shouldst reckon none so frail as thyself.

Life is in itself neither good nor evil, it is the scene of good or evil as you make it; and if you have lived a day you have seen all, one day is equal and like to all other days. There is no other light, no other night, this very sun, this moon, these very stars, this very order and revolution of things, is the same your ancestors enjoyed, and that shall entertain your posterity.

Lightning Anecdotes

General Anson Stager, Vice President and Western Manager, used to be a York State printer boy, and about the time the telegraph got into running order he turned his attention to telegraphy, and soon became an expert at the business. About twenty years ago he was still an operator, and the possibilities of the telegraph were yet in a large measure in embryo. At this time Pittsburg was the General's headquarters. One bitter cold night he found himself on the train on the Pittsburg and Fort Wayne Railroad. All of a sudden the train came to a halt. Time passed, and still there was no forward movement. Finally, after half an hour had gone, our operator made bold to inquire what the matter was, and was informed that the locomotive had gone back on them, and that they would be compelled to wait at least four hours for relief.

"How are we to be relieved?" inquired Mr. Stager.

"The conductor is hoofing it to the next station, nine miles away," was the answer.

"Why didn't you call me?" inquired our operator.

"Call you? What could you have done?"

"I would have telegraphed."

"Are you an operator?"

"Yes, sir."

"Have you an instrument?"

"No."

"Then what good would it have done to have called you—you can't telegraph without an instrument."

"Yes I can," said the ambitious Anson, "and if the officers of the road are willing, I'll make the attempt."

It should be remarked here that the director's car, well filled with dignitaries of the road, was attached to the train. These were exceedingly anxious to reach Pittsburg to attend an important meeting, and the delay was exceedingly annoying to them. Although incredulous to the last degree, they gave the word to "go ahead," and all of them "stood round" in the bitter cold to witness the experiment.

Detaching several car lengths of the conductor's bell rope, our operator threw it over the telegraph wire and broke it as near as possible in the middle between two poles. Having succeeded in this enterprise he was not a little chagrined to find that the wire was not charged. Nothing daunted, the sanguine Anson tackled another wire, and the only one there was. This proved to be well charged and prepared to act responsive to his desires. He prepared to "make both ends meet" in more than a metaphorical sense. Securing all the slack he could, he brought the two ends together, and, by expert touches, succeeded in calling the nearest office. He then sent a brief message calling a fresh locomotive to their aid. The operator felt considerable confidence that his message had been properly transmitted and received, but he wanted to be fully satisfied, and how to receive a message in return was the problem.

The sense of hearing, on which the operator had been accustomed to rely, failing him for want of an instrument, it was necessary to call some other sense of faculty into requisition, and hence he decided on that of feeling, or touch, and concluding that the tongue was the most sensitive to electricity of all the parts of the human body, he accordingly applied the wire thereto. But this was not enough. Ground connection had to be established. However, even this want was overcome. The railroad track was made to do duty, and did its work remarkably well, though it was cold comfort for our operator to hold on to the rail in the nipping frost with the bare hand. But he made his circuit, and as he held the end of the wire to his tongue he soon felt the shocks, and was thus enabled, through actual impression, to read what the operator nine miles away was putting on the wire.

Meanwhile the conductor was trudging his way along, but before he had gone half the distance to the station he was met by the locomotive hurrying to the rescue. He was utterly confounded and not a little terrified to see the monster booming along, and made frantic efforts to bring it to a halt by placing himself directly in its path on the track and swinging his arms for dear life. He succeeded in attracting the engineer's attention, and as soon as he came within speaking distance he wanted to know "what in the world he was doing on the track at this time?" "Been called," was the answer. "Who called you?" "Been telegraphed for by a broken down train some five miles along here. The Superintendent himself sent the order." The conductor now found himself in a regular fog, but got on the locomotive, and when he reached the train he lost no time in seeking light.

Colonel Wilson, the local superintendent, maintains that the method of reading by sound is a sort of Western institution. It happened that when the Prince of Wales visited this country sound reading was a thing entirely new to him, and he and his escort never ceased commenting on the fact that they should come to the wilds of the Mississippi Valley to become familiar with one of the marvels of the world.

Colonel Wilson was the telegrapher accompanying the Prince and his suite while traveling in the West, and he has a rich fund of anecdotes concerning that period. While traveling through Illinois the party took frequent occasions to indulge in hunting excursions. To this end the most sparsely settled regions were selected. At one time, after a protracted hunt, the party had occasion to cross a railway track, and the sight of the telegraph poles and wire excited in the Prince and several members of the suite a desire to place themselves in communication with civilization once more. The Colonel adjusted his pocket instrument, but soon found that in one direction the wires were down, and, casting his eye along the track he noticed the source of the trouble, by means of a field telescope, about half a mile beyond.

"I guess I'll mend that break," said the Colonel, in the presence of the Duke of Newcastle.

"Have you the wire to do it with?" inquired his grace.

"No," answered the Colonel, "but I guess I'll send for some."

"But, sir," said the Duke, somewhat alarmed, "we can't do without you, and I'm sure we can't wait here a day or two while you send to the nearest station, which I understand is ten miles away, for the repairing material."

"I'll repair the break and not detain you longer than the time you will require to dispatch your lunch," returned the imperturbable Colonel, and while he was still talking to the credulous Duke—to whom, however, he had given no hint how the repair was to be effected—a train came in sight. In a twinkling it was upon them and, as it passed the spot where the party was congregated, at a tremendous burst of speed, a coil of wire was thrown from the baggage car, and in half an hour the break was repaired.

The Duke after referred to the fact as a most striking example of what was known as "fast" America, and even after the simple explanation of the "trick," he still thought it marvelous and could only have been performed in America. The case was simply this: As soon as Colonel Wilson found the wire broken, and while in communication with the nearest station in the direction in which the wire was not broken, he had given orders to put a coil of wire on the next train, with instructions to throw it off at the point where the company would be found making a halt. Even while he was giving this order the answer was returned, "The train is now in sight," abd hence he could calculate that it would reach the point at which they were camped in less than half an hour. It was about twenty minutes later that he had the conversation with the Duke, and hence it was that while they were still talking over the matter the train came in sight.

At one time, in the early winter months, one of the company's cables crossing the Mississippi was broken. As bad luck never comes singly it so happened at the time that the river was wild with ice, and it was literally impossible for those on one side to communicate with those on the other by the ordinary methods. In this dilemma it occurred to Colonel Wilson to bring a locomotive into requisition. As quickly as possible he submitted himself to a short but comprehensive course of instruction with reference to working the whistle of his new contrivance, and, having acquired the art, the iron horse was pranced to a point near the river's side, and then the Colonel began to "blow his horn" as he never blew it before nor since. People in the town on the opposite side wondered for a long time what had got into that locomotive, but all of a sudden a telegraph operator over yonder began to pick his ears and exclaim, "Why, that darned locomotive is calling this station; it is giving our signal!" Then it occurred to the operator what was wanted, and, engaging a locomotive on his own side of the river, he ran to a convenient point, and then ensued what must ever be regarded as one of the loudest intelligible conversations on record. The method of contab proved perfectly satisfactory.

Delights of an Extra Operator's Life.

DEAR OPERATOR:

Once I was happy, but now I'm—not. It had always been my desire to occupy the position of "extra." The very name possessed a charm which completely won my admiration. It always seemed to me that those who occupied the position were specially pleased with it, always dressed "loud," and seemed to look down with utter contempt upon those who were so unfortunate as to occupy a permanent position. Well, at last my wish was gratified—at least in one sense of the word—that of attaining the position. But alas, the gratification ended with the title. Last summer I was asked to fill the position referred to on a prominent road in Missouri. Immediately upon being initiated I was sent to a station not far distant from the capital of the State, a place of about seventy five inhabitants located in a very swampy part of the country. The only means of entering the office was by inserting my fingers and toes in knot holes in the sides of the platform, the same being six feet high. I was informed by an intelligent lad that "thar war a kinder ladder to climb this ere platform, but year afore last it war carried away by a flood." The landlord—there was but one place in town at which I could board—waxed wroth because I told one of the railroad boys that I liked the place just splendid; that we had a change every meal—fat pork and beans for breakfast, beans and fat pork for dinner, and fat pork and beans for supper. Well, I left that place, and shall ever pray the good Lord to direct my footsteps and prevent my ever landing in such an abominable hole again. From this place I was sent to work at a wreck near St. Louis. There was but one house in the neighborhood and it required considerable talking to gain permission to sleep on the sofa at night. But I was thankful even for that. It was in the month of August, and the thermometer stood somewhere up in the hundreds. The first day some good Samaritan—I don't know what that means, but I think it sounds good—loaned me an umbrella. We (myself and line repairer) opened an office conveniently close to the scene of disaster. The first two or three hours I stood it like a little man, but my gracious! you could not imagine the weight of that umbrella after I had held it a couple of hours; it was simply tremendous. When, after three days, the debris was all cleared up, I was permitted to go home for a day or two, I was a changed man—so completely sunburnt I scarcely knew myself. My wife closed the door on me, my children pelted me with stones, and the dog barked at me. I felt mad, and resigned immediately. And now when I chance in my travels to meet an extra operator he does not intimidate me any more than would a superintendent or manager of the road. Should this be the means of warning some of the ambitious, why—I shall not have lived in vain.

Yours earnestly, NED IRELAND.

Danger of the Telephone.

Perkins is one of those progressive men who want to try every new invention that is brought out. His last freak was to get enthused over the telephone, and have one put into his house connected with one in the office on California Street. He foresaw great advantages resulting from this arrangement. He could hold affectionate conversations with his wife when business was slack and tell her what time he would be home to dinner. She could tell him when Johnnie fell down the cellar stairs and skinned his nose, and insist on Perkins calling three or four doctors. In fact the uses of this instrument were innumerable and invaluable. Perkins found them so, as will be shown. Last Monday he was discoursing with Mrs. Perkins about a new bonnet, when a brother broker came in to see about some stocks. Perkins telephoned to his wife that he was engaged, and turned around to talk business without disconnecting the instrument. He talked about Julia, Lady Brian and other stocks, while Mrs. Perkins listened intently at the other end of the line, occasionally catching a name and wondering what on earth he could be talking about. Her suspicions were aroused, and when Perkins said to the broker in a loud tone as he went out, "I'll take Julia at 6:30" she knew there was a woman in the case, and conducted herself accordingly. The first thing Perkins knew the telephone was kicking up an awful row. "I'll Julia him—wretch—villain—married fifteen years—here, you Johnny, saw the handle off that broom quick, or I'll skin you alive—where's my rubbers? just wait till I get hold of him." These were some of the sounds that reverberated through the telephone in a confused manner, intermixed with a general racket that denoted active and warlike preparations in the enemy's camp. Perkins saw that his only safety lay in getting home by a circuitous route, and trusting in his ingenuity in appeasing her wrath when she returned from her sortie. He accordingly locked the door and put his plan into execution. He reached home at about the same time that Mrs. Perkins arrived at the office, and, putting his ear to the telephone, he heard her trying the door. Thinking to appease her wrath, he placed his mouth near the vibrator, and said in a voice loud enough to be heard through the door, "Don't be angry, love, I would'nt look at any other woman; you know I love no one but you." Mrs. Perkins was listening at the door, and heard his endearing words, but mistaking their application, her suspicions were confirmed. A furious broomstick attack upon the door followed, and the crash of glass told Perkins that an entrance had been effected. Mrs. Perkins then rummaged the office, tipping tables over and moving bookcases in her search for the recreant husband and that hussy Julia, to the infinite amusement of Perkins, until she finally upset the telephone stand and broke the connecting wire. A blank occurs at this point, extending too late in the evening, when Mrs. Perkins came home after an unsuccessful search at all the theaters. Perkins says the bruise, extending from the corner of his right eye across the bridge of his nose and disappearing in the left corner of his mouth, was caused by running against a closet door in the dark, but it is a significant fact that he has sold his telephone and uses the wire for a clothes line.—*S. F. Call.*

The Electric Pen.

Edison's Electric Pen, an ingenious apparatus by which thousands of circulars, etc., can be made from one writing, consists of a small electro-magnetic engine, mounted upon a framework, secured to the top of a tube pointed at the end. Within the tube is a common needle, fastened to the end of a wire, which is given an exceedingly rapid vertical motion by cams upon the rotating engine shaft. This needle is projected from the small end of the tube at the rate of 50 times per second. With the pen upon a sheet of writing paper placed on common blotting paper, a letter may be written as fast, and with a little experience as easily, as with an ordinary pen, but the characters, unlike those formed with the ordinary pen, will be composed of innumerable holes punctured in the paper by the rapid projection of the needle from the tube. The result is a perfect paper stencil, which treated precisely as an ordinary stencil, will give similar result. The motive power used to drive the engine of the pen is derived from cells. A particular form of this battery was especially designed by Mr. Edison for the Electric Pen, with a view to economy and its use by persons inexperienced in electricity. It is provided with a lifting arrangement whereby the battery plates may be raised from the exciting fluids when not in use, thus preventing consumption of materials.

The current from the battery is conveyed to the engine by two wires insulated from each other, and placed in a single flexible cord, thus giving a free movement to the pen.

After the stencil has been prepared, it is a very simple matter to obtain a great number of fac-similes of the original writing, by the aid of the Duplicating Press which accompanies the Pen. The Electric Pen is manufactured by the Western Electric M'f'g Co., of Chicago, whose advertisement will be found on another column. The company want telegraphers everywhere to introduce the pen. Circulars and full particulars will be sent free on application.

Washington Notes.

The rush and strain of winter's work being over, with the adjournment of Congress and the inauguration, we had settled down to enjoy what rest we could get from the usual summer routine, when the sweeping reduction in rates by the A. and P., followed by similar action on the part of the Western Union, knocked our serenity into smithereens by suggesting the possibility of another reduction in our scant salaries, the bare thought of which was enough to recall all the bitter feelings which the "sliding scale" had caused, and which we had, as time passed along, almost forgotten. That our fears were not entirely groundless we soon learned, by orders to the effect that every operator was to be "laid off" one day in his turn for the present, the same, of course, to be deducted from his pay. This reduction, now that there is no way of making it up by "extra," makes quite a difference in the amount to be received and that made during the winter months, which will be felt keenly by some. How long the arrangement is to last no one can tell, but that it is now in operation is an unpleasant fact, and "sufficient unto the day is the evil thereof." Just why the operators should be reduced for the benefit of the company, while clerks, managers, and chiefs are exempted, "is one of those things no fellow can find out." Fred Marean has been transferred to the day force. A. S. Sinnott has gone to New Orleans to attend upon his mother, who is quite ill.

Cincinnati Items.

Perseverance, with a little oleaginous substance as an auxiliary, will generally meet with success. I am gratified to see that Judge Gilliland has, by his energy, secured a goodly number of subscribers for you in this office. We have a full force of sociable and good-humored ladies and gentlemen in Cincinnati, all first-class operators (instantaneous death to intimate any grade below that) and good workers, who know how to get off business. We are located in a healthy clime—or at least we have a healthy climb of five flights of stairs to the operating room. Without going into the tedious detail of the office —which is neither desirable nor instructive—I will simply give you the chief contents, viz.: 32 day operators, 15 married, 17 single; 19 night operators, 7 married, 12 single; 3 subs, 4 quads, 5 duplex, 4 repeaters, 43 single instruments, 1 Centennial memento, namely, a large group of the photographs of each individual operator working in this office during 1876, and which was emblematically decorated by our fellow-operator, O. J. Waddell, who worked in New York office in 1866. We also have a 76 wire spring jack switchboard, a Babcock extinguisher, and some castile soap. Cleanliness, you know, is next to Godliness. Business has, since April 9th, received quite an impetus, in consequence of the emphatic reduction of rates. I hope it will financially bring its equivalent in patronage. I am informed that the receipts have very materially increased. Our branch offices have been put upon a certain percentage, instead of a stated salary. This movement may incite an energy which will better pay both employer and employé. Two of our number, Frank Wilson and John Kelly, have very lately joined the matrimonial ranks, and wonder why they didn't think of that before. The reduction has brought in additional business sufficient to keep the entire force busy, with no time to trade jack-knives or argue civil service reform. *

A California Lady's Open Letter to Nuf Ced.

Dear Nuf Ced, I greet you most cordially, not only as the acknowledged friend of plugs, but as one honest enough to acknowledge the merits of others even though they come from that dark abyss—plugdom. It is so rare a thing to hear a "first classer" give the embryo operator the least praise, that it fills me with astonishment to hear you declare yourself openly the champion of the plug. Have you the moral courage to carry it out? Do the "first class men of to-day remember the errors of their youth?" I never suspected it before, I have always been under the impression that plugs and first class operators were in some way related—plugship being the chrysalis state, this theory would, of course, account for their utter forgetfulness of their former existence, but from what you say I infer that they *do* remember the days of their youth, but, having after many trials—which tends to assify the heart—been promoted to the ranks of "first classers," they take a solemn oath to discourage and prevent, by every means in their power, any aspiring youth who has the audacity to attempt to learn the "bewitching art," telegraphy. But Tammany rings have been broken before now, and that "rara avis," the "first classer," might as well accept the situation gracefully. True merit will be rewarded, and first class goods of any description will bring its equivalent in gold.

Ino.

PENNA. R. R; N. Y. DIVISION. The telegraph department of the N. Y. division is in charge of William Ettenger at Jersey City. There are 635 miles of railroad wire and over 100 offices between New York and Mantua, Philadelphia, where the division ends. In New York, P. R. R. wires run into twenty one offices. The lines are in splendid condition, and the operators happy. The latter might perhaps be more so, were the ten per cent restored which was taken off their salaries over two years ago when business was dull.

P'S AND Q'S.

Cheap Light.

The problem of cheap lights for city streets, halls, and large rooms would seem to be solved by the European invention of electric candles. These candles consist of sticks of charcoal, surrounded by isolating matter, which gradually consumes, leaving the charcoal free like a wick, and this slowly melts away under the brilliant glow of electricity. With two such candles a light equal to that of 100 gas jets may be thrown on a street. An electro-magnetic machine can keep burning twenty lights, at a cost of about half that of gas, and the light is of the brightest and purest kind. This new light is being introduced in France and Germany, and one of the immense Paris railway depots is the latest to adopt it.

RURAL meteorology is progressing rapidly in France, where 500 parishes receive daily weather warnings by telegraph, and the number is increasing.

THE Atlantic and Pacific Telegraph Co., propose immediately to extend its line, which now reaches as far as Portland, to this city and Halifax. Mr. Bryant, the agent, was in this city this week—but not caring to purchase poles at the high prices asked there, has gone to Canada to get them. It is probable that the line will be in working order between here and Portland in two months. Then we shall be able to send telegraphic dispatches at reasonable rates.—*Bangor (Me.) Commercial.*

Engraving by Electricity.

The application of electricity seems to be endless, and now after much experimenting perfection is said to have been reached in a machine for electric engraving. The article to be engraved from is placed under one pole of the battery. The plate to be engraved is placed under the other pole of the battery, on a bed movable by a crank. This pole is provided with an engraving tool. The battery having been put into action, an ivory button moves horizontally over the article to be engraved. When it touches the metal type or the line of the engraving—which must, of course, be a conducting substance—the current is closed, and the engraving tool at the other pole clicks upon the plate underneath it and reproduces the point. The tracer goes over the pattern horizontally again and again, and in a marvelous way a glorified copy of the common original grows beneath the second pole. This is cutting out the engraving. If the engraving is to be raised the process is reversed; that is, the horizontal lines are cut by keeping the current closed during the tracing of them, and the points are left by breaking the currents at those points. By the application of the same principle wood engravings may be obtained of unusual finish.

Some Bulls.

"How are hogs?" was recently curiously enough changed into "How are pigs?"

"Yours to justice of peace not for any of the justices here." The message was addressed to Justus Howe.

"Market will shortly improve on bull side," was recently bull-dosed into "Market will shortly improve in bulls' hides."

A plug at one of the railroad stations in this vicinity, in view of the disabilities under which they labor, suggests a convention of plugs. Yes, by all means let's have it. As they would want a central point to hold the convention, I suggest the middle of the Atlantic.

A young operator, who recently took charge of an office west of this city, received a money order message concluding with the ciphers, "Mention package." Not being aware of the new cipher sheet, he telegraphed back to find out what package was referred to. He found out. He is the same person that translated a message, ordering three dozen ladies and gents overshoes into "ladies and gents overshirts."

The following message was recently handed over to the Western Union Company by the operator of a connecting line: "Please send two barrels cement for stopper family." Whether the cement was forwarded *first opportunity* or not is not known. In handing in this one, the same operator volunteered the information that he had been two hours taking the confounded thing, but never was good on cipher messages: "To Sheriff, St. [illegible]: Stop Van Buren Chase, Aidepot, lame man, carries [illegible] trunk," which being interpreted read "Stop Van Buren Chase at depot. Lameman, carries dinner's trunk."

The Great Quadruplex Suit.

On Thursday, April 19th, the first of the law suits instituted to determine the proprietorship of the celebrated quadruplex patents, was called before the Superior Court in this city, Judge Sanford presiding. This suit is brought by the Atlantic and Pacific Telegraph Company against the Western Union Telegraph Company, Geo. B. Prescott *et al*. McDaniels, Lummis & Southei appeared for the plaintiff—Porter, Lowry & Soren for the defendant.

The occasion brought together quite a number of telegraph notabilities, among which we saw the faces of Moses G. Farmer, F. L. Pope, General Eckert, William Orton, Gerrit Smith, George B Prescott, G. M. Phelps, Jr., George D'Infreville and many others well known in telegraphic circles.

The first two days were consumed by the plaintiff's counsel in opening the case, introducing documentary evidence, etc. Friday afternoon at three o'clock, the court adjourned until Monday morning. Shortly after the opening on Monday, April 23d, Mr. George D'Infreville was placed upon the stand, and examined as to the possibility or desirability of working the "Automatic" in connection with the Quadruplex. Although laboring under the disadvantage of not being able to express himself fluently in the English language, his evidence was remarkably clear and succint. A long and severe cross examination by the defendant's counsel demonstrated only his close acquaintance with the points at issue.

At noon on Thursday, Mr. Thomas A. Edison took the stand for the plaintiff, and his examination as to the meaning and intention of the Harrington contract was commenced. It is still proceeding as we go to press. Realizing the great interest that is felt in this suit by telegraphers we shall keep our readers fully posted as to its progress.

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A Third Edition of Oakum Pickings at 75 Cents a Copy.

As will be seen from advertisement on page 14, we have just issued the third edition of Oakum Pickings. The book is printed on as fine quality of paper as before, contains the same steel engraving of the author, and is substantially sewed and bound in strong paper covers, and sold at seventy five cents a copy. Nobody should now be without a copy of Oakum Pickings. We will mail the book and a copy of THE OPERATOR until January 1, 1878, both prepaid, for $1.50; the book and the paper for one year, $1.75, or Oakum Pickings and Lightning Flashes, $2.00. Send in your orders.

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New Books.

AMERICAN MANUAL OF PHONOGRAPHY (Cincinnati: Elias Longley). This book aims to be a complete guide to the acquisition of Pitman's Phonetic Shorthand, and possesses many advantages over any work of the kind we have hitherto seen. By studying it for even half an hour every day, one will very soon become a fair shorthand writer, and, like telegraphy, all that is then required to fully master the coveted art is practice. The price of the book is one dollar (see advertisement). It can be ordered direct, or through THE OPERATOR Purchasing Agency.

THE APPLICATION OF ELECTRICITY AS A THERAPEUTIC AGENT. By J. H. Rae, M. D. (New York: Boericke & Tafel.) Dr. Rae has given considerable attention to electricity as a curative agent. The present handsome volume is intended, he says, to give physicians and others an idea of how he uses electricity and electro-magnetism, and he hopes it may lead to more and closer experiments by physicians. The price of the book is one dollar. Those desiring copies can order through this office.

Dashes Here and There.

The greatest City in the world—Electri city.

"Send policies at once," brought a squad of police on a special train.

WHEN requesting a change of address, subscribers will please give their *former* as well as their present address.

The A. & P. is doing a very heavy business in Chicago both day and night. Duplexing all their wires, working duplex with Buffalo, St. Louis, Cincinnati, Cleveland and Milwaukee.

A correspondent of the London *Telegraphist*, writing from Flinders, Victoria, says that—"Melbourne is the chief telegraph office in Victoria, and gives employment to about forty telegraphers (including females). Most of these operators are very skillful manipulators, and as they are all obliged to read by sound—tape reading at that office having lately been abolished—they also receive in excellent style."

The infallibility of the telegraph is never doubted by some people, but the recipient of the following message, transmitted during the night over one of the "Press" wires leading west from Chicago, was at first dumbfounded by its announcement. It was as follows:

"Susan sick typhoid five babies also."

Susan might be sick, but the five babies were something new and absolutely astounding to him. After seeking the advice of a friend he concluded that some one was endeavoring to play a trick on him and proceeded to the telegraph office in high dudgeon where he demanded an explanation. The operator, in answer, said that there might be a mistake, and had the telegram repeated from the originating office. It then read, "Susan sick typhoid fever baby also." We won't say who made the mistake but on that certain "Press" wire do not, we beg of you, say anything about Susan and five babies.

TELEGRAPH CURIOSITIES.—Mr. J. W. Bone, F. S. A., writes that he has seen a telegram in which the following words occur: "De Honorificabilituduitatibus gentis Ytùrribèrrigorrigoytaer ròtacoechèa." They were transmitted without the slightest mistake. The last of the words quoted is said to be a Basque patronymic. Extraordinary as the two long words are—the former consisting of thirteen, the latter of sixteen sylables—Mr. Bone has been told that they are not the longest that have passed over the electric wire, a word occupying three lines, and containing a hundred and seven letters, having been telegraphed. The same authority has heard that in Cornwall mining speculators, in transmiting—or, rather, immediately after transmitting—important news to London, with orders to buy or sell mining shares, have sometimes telegraphed messages containing long and perplexing Cornish names, and required them to be "repeated" back to the senders, their object being to occupy the wires for a few minutes so as to prevent the sending of rival messages.—*Telegraphist.*

◆

Echoes from 197.

The main office is to be lighted by electricity. Won't that be nice?

M. C. Bagley is going to Richmond, Va., for a few weeks for the benefit of his health.

Mail Agent Holmes is looking quite young and fresh. Cause, blue glass in the window. Business is quite lively at the main office.

Our regular 197 correspondent is out of town, which accounts for the scarcity of Echoes in this issue. He'll be back before our next number.

Mr. Holmes will take orders for Lightning Flashes or Oakum Pickings, or you can send them to this office.

The Enterprise Dramatic Association, composed for the most part of Western Union main office employés, is to give its third entertaiment and ball at Turn Hall on Wednesday evening, May 2d. A pleasant time is anticipated.

Speaking with the genial mail agent, Holmes, the day after our last issue, that gentleman referred to a slight accident that had taken place that day in the ladies' department. "She sprained her ankle," he went on, "and with the perversity peculiar to her sex, chose the very wrong day on which to do it. Now, if she had been accommodating enough to have sprained it the day before, you could have had an item about it in THE OPERATOR. Some people are so thoughtless and unobliging!" and he sighed earnestly and enthusiastically.

PERSONALS.

Mr. J. C. Coulter holds forth at Ogden, Iowa.

H. H Smith, of San Francisco, has been added to the Western Union staff at Kansas City.

Mr. O. M. Browning is agent and operator at New Hope, Ky., L. & N. R. R.

C. D. Meserve, of the Board of Trade Co.'s Chicago office, has been appointed manager for the same company at Toledo, Ohio.

Mr. A. A. Farmer, Box 66, Georgetown, Ontario, desires the address of J. C. Showerman, late G. W. R. (Canada) Telegraph Supt.

Mr. Robert Hunt is operator for the Land N. R. R. at Richmond Junction, Ky. Bob is a splendid fellow, and a first-class operator.

Mr. E. W. Emory, (Babe) has resigned his position as manager of the A. and P. Palisade, Nev. office, and is "subbing" in the Salt Lake W. U. office.

We had the pleasure of a visit last Wednesday from Mr. W. W. Currier, chief operator B. & O. R. R., Newark, Ohio, who was on a brief visit east.

Mr. W. A. Burnside relieves Mr. J. D. Parish, operator for the W. U. at Harrodsburg, Ky., for a few weeks. Mr. Parish goes to Tennessee to visit relatives.

Ed Brown, formerly manager of the W. U. office at Reno, Nev., has quit the "shackle business," and accepted the position in "Nc" office, made vacant by the departure of Mr. De Long.

Mr. O. B. Wetherhold, for several years connected with the P. R. and P. Telegraph Company as extra operator, has resigned, and gone into the wool hat manufacturing business.

We regret to note that Mr. W. G. Gould has retired from the editorship of the London *Telegraphist*. It was a very spicy little paper under his administration, but we hope this feature may continue under the new management.

James Partrick, of the firm of Partrick & Carter, and one of the oldest telegraphers in the city of Philadelphia, was knocked down by a runaway team in that city on April 12, and severely injured about the head and body.

John Donnelly, a fine artist and genial gentleman of Virginia City, Nev., W. U. force, has been transferred to San Francisco, (same company). J. De Long of same office has accepted a position with the A. and P. Co. at Los Angelos, Cal.

Mr. L. T. Clemans, night operator of the W. U. Co., Logansport, Ind., has been called to Lafayette to succeed Mr. Green of that city, who has resigned. Mr. Clemans has been succeeded by Mr. W. A. Gibson. Mr. Frank Burley, recently of the A. and P. at Indianopolis, fills the existing vacancy.

Miss Polk is the present fair manager of the Valley Falls R. I. office, on the P. and W. R. R. wire. The Providence main office boys have learned by experience that it is generally advisable to start with a full pen of ink when the above named young lady signifies that she has "Ahr," as her decidedly energetic and rapid manipulation admits of naught but the strictest attention to business.

Mr. Tom Thornton, who has been rusticating for the past three years for the benefit of his health, has accepted a position as night operator for the A. and P. at Winnemucca, Nev., *vice* U. C. Palmer transferred. Mr. Thornton's friends will be glad to hear that he has completely recovered from that lasting disease consumption, and is as hale and hearty as a "Piute Injun."

Superintendent Holmes has lately been making war on the students along the line of the Eastern Division, Erie R. R., for which he has the sincere thanks of all thinking operators among us. He routed four on Saturday 21st, and it is believed that more will follow. There is plenty of field left yet for this good work. Let Mr. Holmes give the station agents attention next. ALONG THE LINE.

AN old subscriber in Ohio writes: "The value of the 'personal column' of your paper was illustrated most satisfactorily (to *me* at least) a short time ago. An old and highly-esteemed army friend of whom I had lost sight since 'war times,' saw my name in the above-named column, and immediately wrote me. I assure you, Mr. Editor, I shall ever feel grateful for thus reuniting me to this dear old comrade whom I had almost given up as dead. May God bless THE OPERATOR and all connected with it!"

We have a letter for Mr. S. S. Kerr. Will he please send his address to this office, and it will be mailed him.

U. C. Palmer, who has been engaged as night operator in the Atlantic and Pacific telegraph office here for nearly a year, left for Palisade, to which place he has been transferred. By his gentlemanly deportment, courteous and affable disposition, and prompt attention to all business intrusted to him by our people, Mr. Palmer has made a host of friends in this community, who, while regretting his departure, earnestly hope that prosperity's choicest blessings will surround his life in the new field of labor. The news of his promotion to the managership of the Palisade office will meet the approbation of his many friends both east and west.—*Winnemucca Silver State.*

The following is from the Springfield (Ill.) *State Journal*, and speaks for itself. Mr. Smith is at present stationed at Earlington, Kentucky: "Chas. G. Smith, one of the most popular telegraph operators that ever handled a key in the Springfield office, to-day leaves the city for a more enlarged sphere of usefulness—to connect himself with the dispatching of trains on the St. Louis & Southeastern railroad—and will probably be stationed at some point on the line in Kentucky. Mr. Smith's departure is alike regretted by his office associates and by the newspaper men whom he has so long and so acceptably served on telegraphic press reports. His many personal friends in Springfield will gladly learn of his continued success in the vocation for which his superior skill so eminently fits him."

B. and O. Co. Div. Notes.—This division is under the management of Mr. J. C. Haukinson, division operator at "Wf.," Newark. From this office Mr. W. W. Currier salts the plugs during the day, and Henry Bartholomew calls the "sixes" at night. Messrs. James Lytle, John Gallagher, and G. N. Spencer, train dispatchers, are also located at Newark. At Black Hand we find Isaac Simpson and C. T. Morton; at Zanesville, T. W. Lee and Charlie Baird; at Norwich, Howard Jones and W. M. Anthony; at Cambridge, "Kit" Carson and A. Dunlap (an old-timer). Will Stellars and Clarence Wilkins "hold the fort" at Spencer's Station, E. V. Shipley and L. T. Patterson at Barnesville, H. L. Hoge at Belmont, Charlie Koenig and W. P. Parks at Lewis' Mills, and F. C. Halstead and T. M. Galleher at Bellaire. At "A," Wheeling, the Eastern terminus of our string, Manager Tracy is still to be found. He is ably assisted by Mr. Frank Warden. Mr. "O." Williams is the night man.

MARRIAGES.

Sawyer—Pollard.—At Philadelphia, April 11th, by the Rev. Charles G. Ames, Mr. William H. Sawyer, Superintendent A. D. T. Co., to Miss Ermina H. Pollard.

BIRTHS.

April 3d, to L. T. Graham, operator and agent, Cornwallis, W. Va., B. and O. R. R. a daughter.

A BEAUTIFUL ENGRAVING

OF

Prof. S. F. B. MORSE,

FATHER OF THE TELEGRAPH.

Numerous inquiries for a really fine picture of Prof. S. F. B. Morse have induced us to go to the expense of procuring one of the finest engravings of this gentleman, so dear to the heart of every Telegrapher, that has probably ever been executed. It is from a photograph by Sarony, and engraved in what is called stippled work—the highest style of the art. It shows the numerous crosses, medals, and badges of honor with which the Professor was decorated, and is a picture that his sons of the Telegraph will be proud of.

Impressed on heavy cream tinted card-board, with a neat tint back ground. Size, 10 inches by 9, suitable for framing.

Price only **15 Cents** each, postage pre paid. To agents, **$1 40 per dozen.** Agents wanted.

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On account of our position, we can purchase almost every kind of goods much cheaper than you could, were you on the ground, especially Telegraphic goods of every description, Sounders, Keys, Pocket Relays, Batteries, Plain and Gutta Percha Covered Wires, Books on Telegraphy and Electricity etc., or anything, no matter what it is, advertised in these columns.

No matter what you want from New York, whether it be in the line of Telegraphic goods or not, send the order to us. We will see that you get exactly what you want, and at the very lowest price, never charging you *more* than if ordered direct, and very often considerably *less*.

A stamp should be inclosed when asking for prices, or whenever your letter requires an answer.

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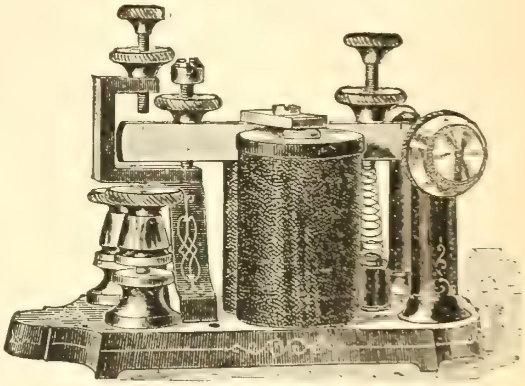
Chicago, January 25, 1877.

We will forward the following of our Telegraph Instruments by mail at the prices named:

Name of Instrument.	List Price, or when sent C.O.D.	Discount for Cash with Order.	Net Price, Cash with Order.	Price by Mail, Postage Paid.
Private Line Instrument, without Battery	$8.00	20 per ct	$6.40	$7.20
Patent Pocket Relay	18.00	20 "	14.40	14.50
Putt's Mechanical Instrument	5.00	20 "	4.00	4.60
No. 3 Sounder, reduced from $6.00 to	5.00	20 "	4.00	4.40
No. 1 Sounder,	7.50	10 "	6.75	7.25
Lewis' Legless Key	5 00	10 "	4.50	4.75

The first four of the instruments named above are the only ones on which we make a 20 per cent. discount, and this is made only when the money is sent with order.

Western Electric Mfg. Co.,
220 Kinzie Street,
Chicago, Ill.



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As shown above, (cut half size) *has no superior* for practical use, is well made, finely finished, gives a loud, clear, agreeable sound, works on any length of Railroad or Commercial line as a "local" or "direct" on line ten miles or less.

THE SPECIALTY KEY,

Designed expressly to match the Specialty Sounder, is of standard size, well made, finely finished, of brass throughout, except the ornamental iron base) and gives *entire* satisfaction on any length of line.

Specialty Sounders,	C. O. D. $4.00	Cash, $3.20	by Mail, $3.50
" Key,	" 2.00	" 1.60	" 1.70
Battery No 1 Calland,	" 1.45	" 1.25	

Specialty outfit complete, consisting of Sounder,
Key, Battery, Chemicals, wire & Manual, c. o. d. $7.75, Cash 6.25

Extra resistance of Sounder for line from one to ten miles, 50 cents additional. In ordering state length of line

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Cleveland, O.

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You can send us a letter something like the following, or cut this out and inclose it, with the amount in an envelope, addressed W. J. Johnston, Publisher of The Operator, P. O. Box 3,332 New York.

W. J. Johnston, New York
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Yours truly,

Name

Address

In ordering Oakum Pickings or Lightning Flashes, it will merely be necessary to say, "Inclosed find 75 cents for copy Oakum Pickings," or "$1.50 for Lightning Flashes," then sign your name and address in full, and the work will be sent you pre paid by return mail. Where the paper and one or both books are ordered together, say, "Inclosed find $—— for The Operator, until —— and a copy of Oakum Pickings (or Lightning Flashes)." Address your letter plainly

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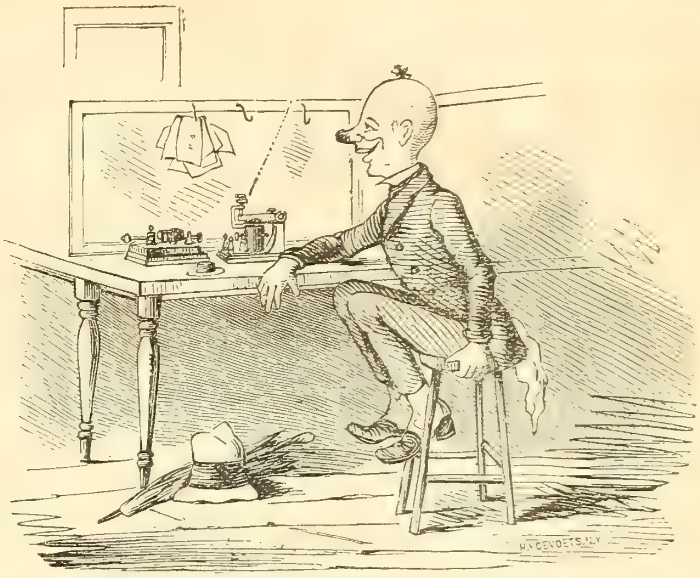
1. Entree.


H.KOEVOETS.N.Y.

2. Placed—"That Familiar Sound."

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Among the full-page cartoon illustrations, drawn and engraved especially for Lightning Flashes, we might mention Telegraphy, Ancient and Modern (double page); The Telephone (double page); The Manager is In and The Manager is Out (double page); Scene A.D. 19 00; A Shocking Affair; Position Is Everything; The Telegrapher's Dream; Scenes on a Jersey Railroad; Lull of Business in the Ladies' Department; The Quadruplex; Discussion About Putting "Ile" in the Batteries; Scene in the W. U. Main Office (three pictures); A Deep, Dire, Dreadful Tragedy in Four Acts; Te-leg-raphers; three full-page illustrations accompany Chops' Carnival of Oshkosh, drawn by J. J. Calahan, etc. Besides these there are numerous smaller illustrations explanatory of the reading matter, a large number of the articles containing from one to six illustrations. The portraits and short biographical sketches of several prominent contributors and telegraphers, each making one full page, are added, so the book overflows with illustrations.

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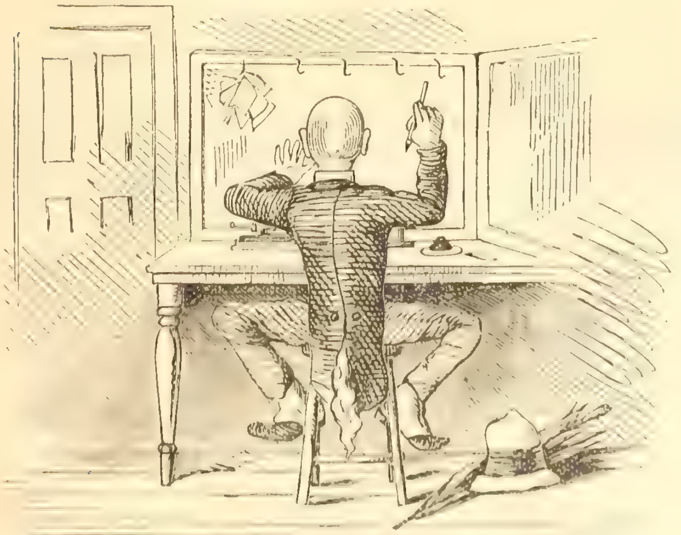

3. "Ha! Ha! I hope he'll rush me!"

4. Rushed!

A Deep, Dire Dreadful Tragedy, in Four Acts.

Read Werner's Review of "Lightning Flashes," Page 4.

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The enthusiastic and very gratifying welcome accorded this, the first book ever published with the object of giving the telegraph profession a literature of its own, has been so general and hearty on the part of both telegraphers, press, and general reading public in all parts of the country, that the publisher, in preparing the third edition, now ready, has been encouraged to make numerous important additions and improvements at increased outlay, which it is believed, will make the book a still greater favorite, and secure for it an even more extensive circulation and appreciation.

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Mr. Phillips, the author, is so well known to the fraternity as a spicy, original, witty, entertaining, and popular contributor to the current telegraphic and humorous literature of the day, and his character sketches of "Jim Lawless," "Tip McClosky," "Posie Van Dusen," "Cap. De Costa," etc., have won for him so enviable a reputation as a humorous sketch writer, that this opportunity of possessing a copy of his very choicest writings—the cream of his contributions to the telegraphic and general press—in one handsomely-bound volume, at a remarkably reasonable price, will, we feel certain be considered a rare treat by many hundreds of telegraphers and others who have made his acquaintance through these sketches.

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The book is divided into two parts. Part first contains 127 pages, embracing sketches, stories, essays, etc., each having a separate title, while part second, from page 128 to the end, contains thirty-three Minor Paragraphs, or short articles without titles. The contents are:

Love and Lightning,
Old Jim Lawless,
Thomas Johnson,
Little Tip McClosky,
Stage Coaching,
Posie Van Dusen,
Block Island,
Bad Medicine,
The Bloodless Onslaught,
Cap De Costa,
Uncle Daniel,
Summer Recreation,
The Blue and The Gray,
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Statistics,
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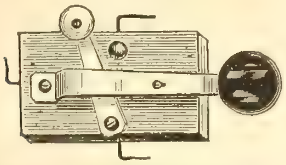

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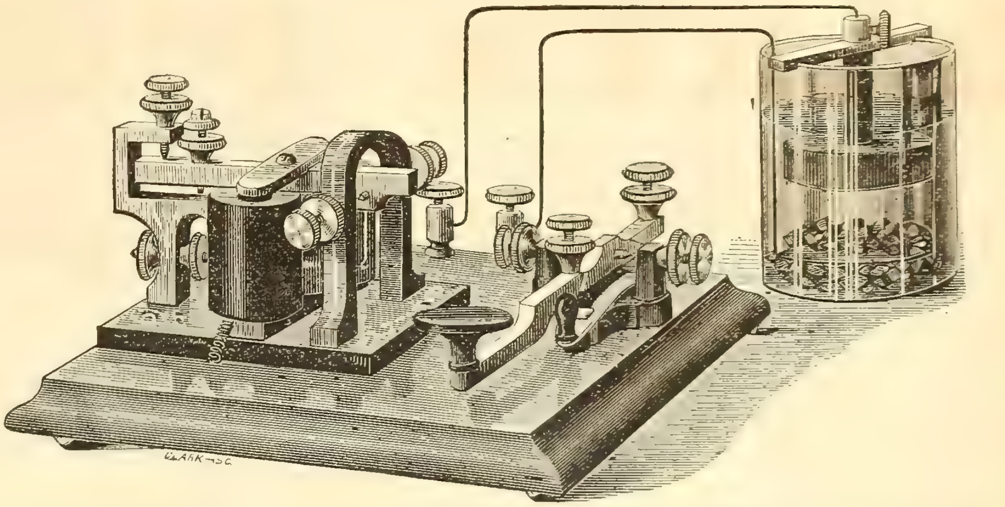

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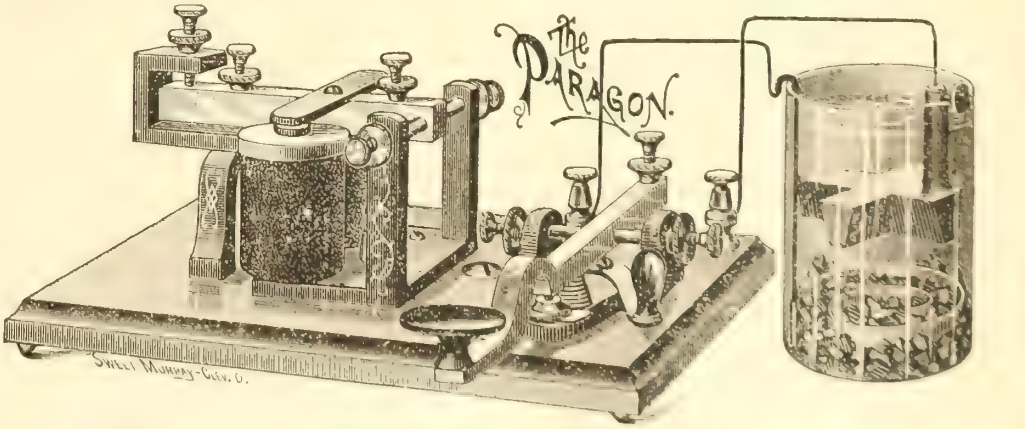
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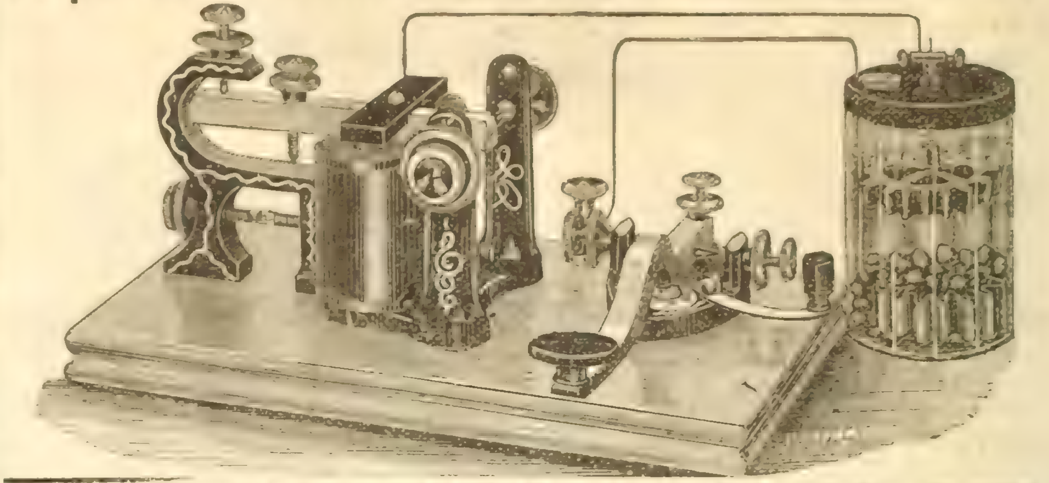

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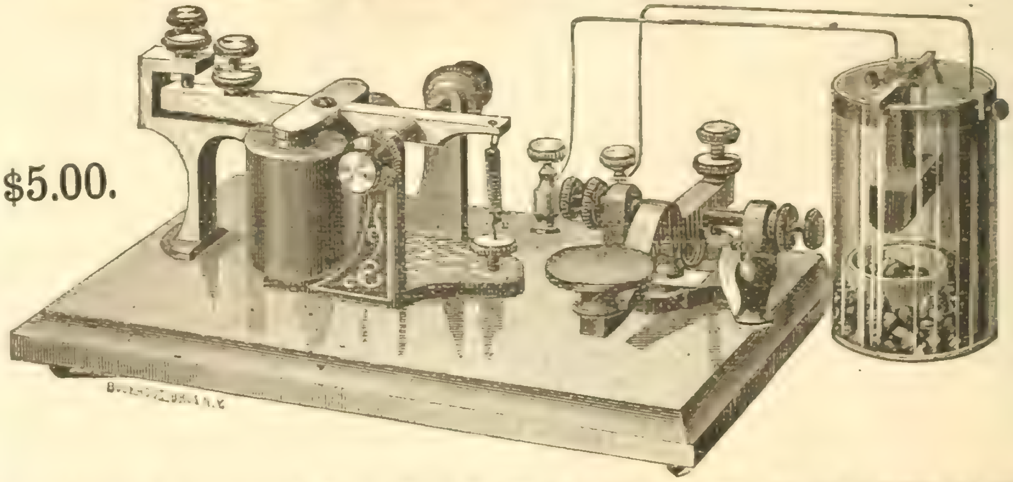

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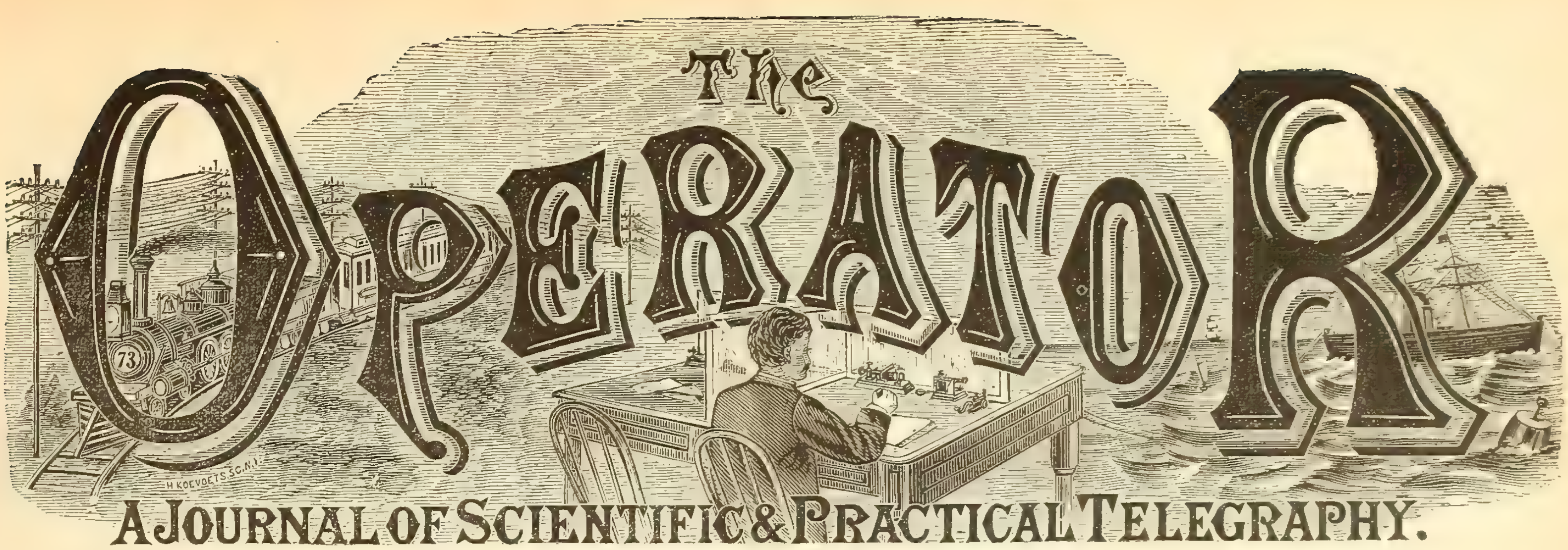

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A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

Vol. VII. NEW YORK, MAY 15, 1877. No. 6

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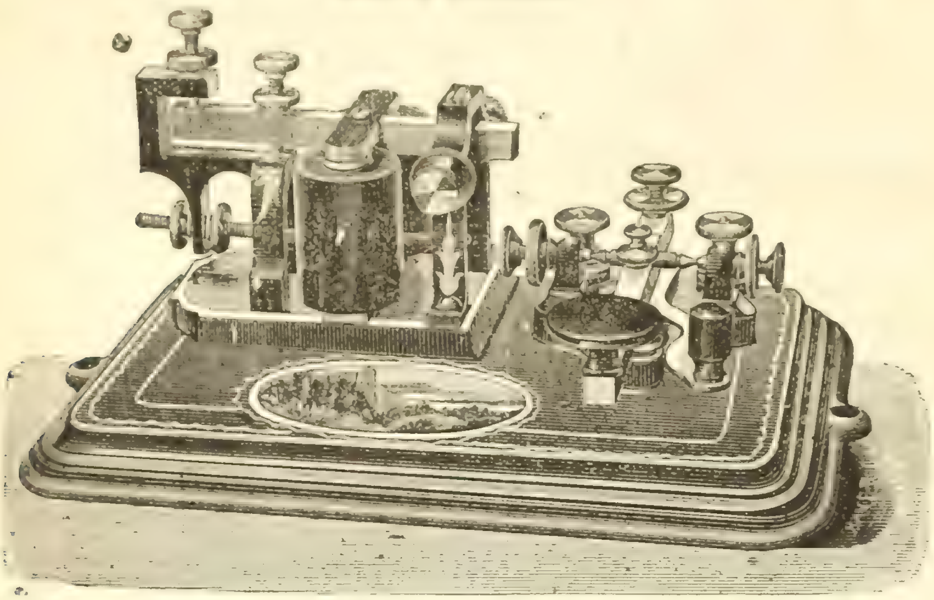

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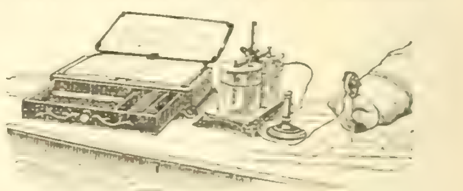

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May 15th, 1877.

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And friend, t'would please my heart right well,
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For thou hast written honest words,
  And all would better be
Could they but scan thy little work,
  And lessons take from thee.

The letter which never arrived,
  It touched my hard old heart;
And, John, I will now confess,
  The tears were bound to start.

And some were in a blithesome tone,
  So quaint with quiet fun—
I laid thy book down with a sigh,
  Right sorry it was done.

For 'tis better than all sermons,
  From our pulpits given;
It makes us feel for fellow man,
  The honest way to Heaven.

And thee'll excuse these few short words,
  A stranger sends to thee;
I only wish to give my thanks,
  For what thou'st done for me.

And when the boatman waits for thee,
  To ferry thee safe o'er—
He'll give to thee, the honored seat,
  Upon the farther shore.

The Thorsdale Telegraphs.

He scanned me curiously for a moment, half smiled, and then, looking serious again, said, "I trust Miss Brown is not laughing at me? A very narrow manor is it. The office we are now in is on my ground. The depot lot I gave to the railroad company, thinking that it might be the future nucleus of some cluster of buildings. It takes so little to start a city—a mere whim, the simplest chance. Caprice can do it, a spring of running water, a clay-pit where bricks can be made; why, a child born has done this wonder. Even a fallen tree across a prairie road, blocking up the path, has induced men to loiter there, to build a shelter of boughs against a passing storm, and lo! a city has sprung up from it. Here, here," and he stamped his foot, "we have everything, all ready at hand, to make a city: a noble lake, a navigable river, fine soil, building material; and yet Thor is nothing, and I am lord of the manor!" Here I winced a little. "If it was not for this position of telegraph clerk, I should starve, for I have no brains for true work!"

I was a good deal startled at his vehemence. Possibly, if there had been a third person present, I might have tittered or giggled in a suppressed way. I only said, rather at random, "Why not sell out one part of the property, in order to improve the other?"

He turned on me instantly, as if I had struck him. "What! Barter off the few acres left, the place where the old Thor forge stood? where my father is buried? Never! We once owned all the land from the lake to here. My father had an emigration scheme, a noble one, and sold most of the land, for a mere song, to speculators years ago. The money he received he gave to a friend, who was to have gone to Norway, to our own village on the fiord; he was to have induced the good peasant folk to take ship and to settle here. That agent cheated him. It killed my old father. His was a grand, big heart, and it was broken. He left me a sacred inheritance, that of following out his wishes. Well," he added with a sigh, "by this time, Miss Brown, I trust you have been made quite at home with all the mysteries of Thor. I talk this same thing to anybody who will listen to me. I dare say I am a very annoying person, and have bored you sadly"

"On the contrary," I replied, "you have interested me. There would be something noble in the idea of a man as young as you are founding a city. That map so neatly drawn in my closet is, I suppose, the plan of Thor?"

"You have noticed it? I have made ten of them, each one more elaborate than the last. It is a great enterprise, an absorbing one, requiring an immense range of thought, to plan out anything which has a bearing on the life, health, and happiness of thousands of human beings yet unborn." Here Mr. Thor again paced up and down the office, as if carried away by the thought. It was then that I saw Mr. Thor at his best. The head was large and massive, the brow broad and lofty, and the eyes flashed as if fired by some internal inspiration. "It is shadowy, vague as yet," he continued, "and rests, this plan of mine, on a very frail foundation—a poor telegraph station and a tumble-down depot. Young, you say I am? Why, I am almost thirty, and am nothing, like Thor; my forefathers at my age went forth and founded cities!"

"Excuse me, Mr. Thor," I said, perhaps unfortunately, with that tendency a young woman has, fresh from her books, to air her slender stock of knowledge, "it strikes me, those old vikings were rather prone to"—

"I understand you," he interrupted, "they tore down rather than built up. Nations, races, have their rhythmic periods. If they sacked, ravaged, and burned down in the Old World, they are reconstructing here. But here I am driveling out an existence over this miserable machine, tapping it as would a young miss her piano keys, when heavier, more sturdy toil should be mine. Curse all such feeble work! Sometimes," and here he gave his instrument a contemptuous fillip, with his finger which threatened to smash the ebony buttons, "sometimes I wish this right hand of mine might shrivel. What it wants is a sledge to wield, some mighty work to do, something to carve and whack, something that would make thews and muscles stand out in tension till they snapped." Just here I stood aghast at his excited manner. The man was in an agony, and the expression of his face was terrible. The calm, quiet repose about him had all gone. It was not a fume or a fret, but as if some pent-up geyser of energy had suddenly burst forth; he seemed so shaken to his very heart. As I was wondering what would be the next phase of his temper, I was rather pleased that the machine before him commenced working. He seemed to be paying decided attention to the communication. Suddenly, with an explosion, he cried out, "That confounded woman at the other end of the line! She says sometimes she cannot make out my messages, and that in case anything should turn up of importance, I had better repeat it. I know her ways; anything disagreeable about these murdering railroads she always announces in this way. She wants to spare my feelings before breaking the news to me."

"It is not surprising, Mr. Thor," I ventured to remark, "that there should be some difficulty in deciphering your messages, at least in certain of your moods, when you take a delicate telegraphic instrument and convert it into an anvil, using your finger as if it was Thor's mallet."

He smiled at this, and replied, "The old blood. You know the old stories, then?"

Now his instrument worked off a long message. It was an important one, evidently, as when he had written it down I heard him signal to repeat it.

"Please listen, Miss Brown. The woman at the other end is nervous and hysterical, as usual. You might as well at once be let into the secrets of these two railroads, both of which are shamefully mismanaged. Sometimes, if it were not for promptness and decision on the part of the telegraph people, passengers would be murdered in the most wholesale way every day in the week. Be good enough to put down in pencil what comes. I will call it out for you: Smoil to Thor. Down train fifteen—no, eighteen minutes ahead of time. Kettridge, the engineer, said to be intoxicated or insane. Retain him if possible—if—but—however." Here something like an oath escaped Mr. Thor's lips. "Excuse me," he cried, "but the woman is so provoking." Just then the instrument began again, and he continued: "Thank goodness, some one has pushed her aside and has her instrument now, and here comes the message, straight. Write it down in ink, now, Miss Brown, there will be no corrections to make." And he called out to me rapidly as follows

"Kettridge crazy drunk; is armed and desperate. There will be a smash. Have telegraphed all along the line to people at stations to jump the train and choke the villain. If he reaches Thor, he may stop. If so, take him yourself. O'Bryne, his fireman, just in with ankle sprained; Kettridge heaved him off the tender. Conductor, new hand and a skunk. Watch out. Get depot hands to help you. Shoot him on sight if necessary. If he gets by Thor he will smash into the up express, which, though instructed to back, is too far this way to be saved on a single track. WATKINS."

As I read it over, my heart was in my mouth: Mr. Thor whistled a moment, then came to me, and read the message which I had transcribed on an office blank.

"Good hand, quite legible. S-h-o-o-t him," (he spelled it out) "not quite as plain as the rest; fault of the pen, doubtless;" then he carefully blotted the paper and put it in a drawer. Now he went slowly to a closet and opened it. I shuddered, as I thought he might have some weapon there. He did take something carefully from a shelf; it was in a case. It was almost sunset then, and the room was getting a trifle dark. There was a slight snap, and I started to my feet, thinking it was a percussion cap. Mr. Thor was lighting a match, which flickered for a moment, and presently he applied it to a pipe.

"Please now take the key, and do not be too quick, or in the least bit flustered; Thor must not lose its reputation. Just say," and here he blew a steady cloud of smoke. "You do not mind my smoke? Just say—"

"This is tantalizing, Mr. Thor," I cried, now quite beside myself. "What—what shall I say?"

"Thor to Smoil: We will do our best.—THOR."

"We—we!" I exclaimed; what can I do!"

"Why, shut yourself up in your closet, if you want to, and criticise my map there. You shake your head? I wish you would. By studying out the localities you might devise for me a place for a grand female university, or a pantheon."

"This is trifling, sir," I said, as I jumped up and walked the office in an agony of suspense. There was a large clock hung up on the wall, which now suddenly acquired the power of ticking, and its beats resounded through the room.

"Agitated you are, and a trifle nervous, Miss Brown," he said, in a rather bantering tone; then seeming to be aware of my condition he remarked, "I am a brute; I know it, but cannot help it." Here he opened his closet, and made a running inventory of its contents. "A violin, sixteen volumes of agricultural reports, a demijohn of acid solution for batteries, and a bottle of patent medicine. Wish I could pour it down Kettridge's throat; it might do his business for him. Suppose we reason this out a little. Providing he is running under a full head of steam, it will take fully fifteen minutes for him to get here. That clock is right to a half a minute or so. If I had now only the absolute time of that train! We must find that out some way—when it started on this race. Ah! here comes something from Twoboys."

With a palpitating heart I read off, "Kettridge's train just passed, tearing through; valves all open. Watch out for him. Only had time to move construction-train on siding. Have started engine after him. Look sharp. Time, six forty five. MANDLY."

"Good!" cried Mr. Thor, "there are some data to go by. Then he may be here three minutes sooner than we expected." I looked at the clock, which now indicated some five minutes before seven.

"The intensity of sound—as you may have been taught, Miss Brown—for I suppose your scientific acquirements are on a par with your historical information—the intensity of sound is at times very much increased, and at other times sensibly diminished, by sudden atmospheric changes, and it looks as if we were going to have a thunder-storm. These storms mostly come from the lake shore; the lake lies this way," and he pointed to a window away from the railroad. "Now you had better go home as fast as you can—and take my umbrella—before the rain comes."

By this time I had been wound up to such a pitch of nervous excitement that I was quivering all over. Yet the idea of leaving the office was farthest from my thoughts. I do not think I could have gone to my boarding house, had I tried to. I felt like locking myself up in my closet, and cowering there; but then, I knew that would be a dastardly act.

"It is rough for you, Miss Brown," said Mr. Thor, looking at the clock. "Though apparently careless about this ugly business, I am not assuming a character foreign to my nature."

I scarcely listened to what he said. The clock face had a fearful fascination for me. I only shuddered at his indifferent talk. Just then I heard—I am certain it was before he heard it—the [illegible], far-off rumble of some train, and I shrieked out, "What in God's name are you going to do?"

"It is the train, sure enough. Track makes a loop near the lake shore, and the sound comes uninterruptedly over the water. He is a good way off yet. Now, Miss Brown, if after awhile he whistles, he will stop. Crazy though he may be with rum, habit may to a certain extent control his madness. If he does whistle, then signal down brakes; there will be no trouble about it."

"But the depot hands who might help you, where are they, sir?"

"They have gone home just an hour and five minutes ago."

"But," I asked in a whisper, "If he does not whistle, does not stop, what then?"

"Well, I suppose I shall have to climb into the water-tank, hang on the spout,—a ludicrous position, no doubt,—and drop into the tender or the train as it passes underneath me; that is, if he is going too fast for me to jump on."

"But it will kill you—must kill you. It is madness; it will be the sacrifice of another life," and I caught him by the sleeve; "you would not have one chance in a thousand. You might just as well lie across the track, hoping to stop the train. You must inevitably be crushed to atoms." Just then a plaintive screech was heard through the storm of wind which was now blowing. "He has whistled! Thank God for that!" I said, with an intense feeling of relief.

"That is three miles off, and he must now slacken his pace, whether he will or not, from the fact of there being just there a bad bit of track and an up grade. But, Miss Brown, I knew all this, and that there was not likely to be much danger about it. Kettridge, I think, will stop in—say, five minutes. It is wonderful how fast the time goes!"

"No, no!" I exclaimed; "there has been to me a whole existence in these last fifteen minutes!"

"You don't say so! Would Miss Brown be kind enough to hold my pipe?" and saying this he placed the pipe in my hand. I gazed at him as if in a dream, when he continued, "It's quite a good bit of meerschaum. I cut the sea-horse on it. Please do not break it. I shall want a good smoke when I come back." Then I felt the tremulous motion an approaching train imparts to the ground, next I heard the rapid snorts of the exhaust steam, and then the whistle screamed, and it seemed to me that the train would whiz directly through the office the next moment.

"Just a third of a mile off; now he slows, and the train hands must have some idea of their danger, and may uncouple, or put down brakes, and so prevent his budging. So good-by, Miss Brown." And with this he leisurely walked out of the office. Now I strained my ears to their utmost, but did not dare to look out of the window. That the train had slowed somewhat, close to the office, was certain, for a volume of sulphurous gas, beaten in by the storm, drove through the windows. Still the train did not halt, but was moving on rapidly. Presently I heard something like the cry of a wild beast. Then there was a struggle on the platform. The noise approached nearer and nearer. The very office now was shaken, and the door bent inward on its catch and hinges. I sprang to the door, and with all my strength pulled at it. It opened inward. Just then a pistol was fired, and I got out of the way barely in time to escape from a man falling on me; for like a stone thrown from a sling, there lay on the floor, a pistol smoking in his hand, the body of a man all begrimed with oil and coal, while over him stood Mr. Thor, one knee on his adversary's breast, and both his hands tight gripped around the prostrate man's throat.

"Why did you not go into your closet? And I dare say you have smashed my pipe. Keep quiet, you poor drunken fool, or must I choke the life out of you?" That was all I heard. Then the room was crowded with people, and next I fainted, for the first time in my life, and, as far as I can remember, in quite a resigned and satisfactory way.

[TO BE CONTINUED.]

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THE most northerly telegraph station in the world has just been set up at a Norwegian fishing station named Gjesver, a little above the seventy-first parallel of north latitude.

Telegraph Operators.

Werner in the Philadelphia Inquirer.

Out of the millions of people who patronize the telegraph, very few are far enough advanced in scientific pursuits to understand by what process their messages are sent, and but few know anything of the *personnel* of that class of bright young men, who, working by day and night, execute the mysterious work so neatly and so well.

Telegraphers, as a class, are a very bright set of beings, of both sexes, and of good practical education and keen perceptibilities. They have a literature peculiar to themselves, publish interesting books from time to time, and support two newspapers in which their sayings and doings are duly recorded. One of these is the official organ of the Western Union Telegraph Company, but the other one *The Operator*, is written, managed, and sustained purely by practical operators. It is one of the best specimens of amateur journalism in the country, and boasts a circulation of 5000 copies. Pictures drawn or engraved by telegraphers, and portraits of the most prominent operators are published periodically, while the great fund of bright wit and curious experience so closely allied to the life of every telegrapher, form its main topics.

There are over ten thousand telegraph operators in the United States alone, and it may be interesting to inquire where this army of skilled labor is recruited. Telegraph "colleges," as a rule, are of little help in filling the ranks of the profession. Those who advertise that they "guarantee" situations to graduates are, to say the least, well worthy of suspicion, while those who "guarantee situations at $100 a month" are downright, shameless frauds. Comparatively few of the present generation of first-class operators are in the business through deliberate choice or design—they drifted thither. Some few first-class professionals have studied and become proficient under some painstaking monitor, but the majority of them rise from the positions of office boys and messengers, growing up, as it were, in the business. A boy or girl, fourteen years of age, may become a moderate manipulator with six months' or a year's practice, but for a person twenty-five or thirty years of age the task is, incredible as it may seem, almost impossible.

Very few of the professionals, even, who are in constant practice, attain perfection, and it is no unusual experience to find nine-tenths of the staff scheming to avoid a particular wire where there is known to be an extraordinary fast man. But among the few who do attain perfection, who are evidently born operators, the rapidity of their work is marvelous. Messrs. N. J. Snyder, of Philadelphia, and Walter P. Phillips, of New York, both earned not only flattering but substantial testimonials from Professor S. F. B. Morse for their wonderful accomplishments. To illustrate the speed at which ordinary telegrams and press reports are transmitted, it may be stated that professional long hand copyists consider an average of twenty-five words per minute very rapid penmanship; but on the main wires the operators are found writing hour after hour at an average speed of thirty-five words per minute, while in press reports the average is increased to forty words. Last winter Mr. E. C. Boileau sent from Philadelphia to New York four hundred and forty words, chosen at random from a newspaper article, in ten minutes, being at the rate of forty-four words per minute. The whole of this was received, *i. e.*, read by sound, and copied as quickly as sent in a neat legible hand by Mr. Walter P. Phillips in New York city. Cases are on record where over fifty words per minute have been sent and received, but they were "picked," that is, words selected for their brevity; and the time made by Mr. Boileau will never be beaten on the Morse telegraph, under like circumstances, except by himself.

The full working capacity of a single telegraph wire, manned by good operators, has never been precisely ascertained, since, from the ambitious character of the men, the more work that is put on it the faster it is worked. The following examples will probably approximate the capacity of one wire as nearly as any that can be advanced. The Associated Press' special wire between New York, Philadelphia and Washington averages 25,000 words every day in the year, while the receiving operator at Philadelphia labors under the disadvantage of writing with a stylus on manifold paper, thus making nine separate and distinct copies of the news matter. Now let any amateur ascertain how long it takes him to send one of the ordinary messages, the average of which, including addresses and "checks," is about twenty-five words, and the following authoritative statement will then enable him to judge of the amount of work possible to be crowded over one wire in a single day: In the Western Union New York office, November 11th, 1872, the commercial and press messages transmitted represented a total of 24,315. Sixty two wires were employed in doing this work (six of them being "duplexed" which gives a total for the day of 392 messages for each wire!

The salaries of telegraph operators, which range from $50 to $110 per month, are unfortunately not paid by any recognized schedule or standard of ability, but according to the scarcity of help at the particular time when they were hired, or the favoritism of an official. This will explain why the pay roll of an office illustrates the fluctuations of business at different times, and why operators who transmit seventy messages an hour are generally found receiving the same pay as, and sometimes less, than the one who does not perform a fourth of that work. A better opinion can be formed of a man's salary by inquiring when he was hired than by scrutinizing his abilities. Although their salaries are not large, very few of them receiving over $80 per month, they have every reason to be contented. Their work is steady throughout summer's heat and winter's snow; an operator never loses a day's time except by his own act, and his position is held, in every sense of the word, *pro vita sine culpa.*

A telegraph operator of acknowledged character and ability has a wide field open to him in life, and among the prominent active workers in the busy hives around us not a few have been telegraphers at some time or another. Nearly all the officials of the telegraph companies are, of course, practical operators. Ex-Governor Bullock, of Georgia, was a telegraph operator, and ex-Minister to Russia and ex-Postmaster-General Jewell once wafted the "lightning fluid" as a professional. Occasionally a persevering business man, more sanguine than any of his fellows, strikes out for himself and learns to transact his own business by telegraph himself, with more or less success. Of this class there is one prominent example in this city. The efficient manager of one of the ocean steamship lines running into this port is an amateur operator of more than ordinary merit, an accomplishment which is of inestimable value to him.

Of late years our more astute statesmen select good telegraphers for private secretaries, inasmuch as they are not only thus enabled to have reliable telegraphing done "at home," but to "pick up" many a stray idea while transacting business in or about a telegraph office. The country was mystified last spring when Mr. Blaine spoke so accurately of the "message" which Proctor Knott had concealed in his pocket, during the dramatic scene in the House, but to those who know that Mr. Sherman, Mr. Blaine's private secretary, is an old and expert operator, the revelation did not seem so much like the work of a clairvoyant. The secretary of Gen. B. F. Butler is an operator, and President Hayes, when Governor of Ohio, employed a telegrapher as private secretary. The Prince of Wales keeps two operators at Sandringham Palace. The same valuable custom is gaining all over the world, and many of the keenest of our business men prefer to select their confidential assistants from the telegraphic ranks.

The telegraph, although so recently brought into general use, is making rapid strides. Four hundred thousand miles of wire are now stretched over the land or under the sea—enough to "put a girdle round about the earth" sixteen fold—but its perfection is far from accomplishment, and the demand for culture and intelligence in that branch of the world's industries will long continue to be very great.

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MERCHANT'S NATIONAL TELEGRAPH COMPANY.—The annual election for officers of the Merchant's National Telegraph Company was held at Pittsburgh, May 1st. The Merchant's line is at present leased by the Atlantic & Pacific Telegraph Company. The wires extend from that city through the oil regions, and this is the line which has been brought out so prominently in the courts. Although the Western Union people hold within forty shares of half the amount of stock, they took no part in the election. The following officers were elected: President, W. G. Johnston; Secretary, J. A. Kerbey; Treasurer, A. B. Chandler; Directors, John Benn, Wm. Frew, D. H. Bates, Dennis Doren, J. A. Kerbey, Thomas T. Eckert.

The Telegraph and the Press.

An operator in the Emerald Isle has lately been making sport for the Philistines of the press. In the dearth of news which lately prevailed, a Dublin journal recently published a telegram in the same state as written by the operator, showing up in a somewhat amusing way the absence of punctuation and capitals, horrid abbreviations, and bad spelling, the mass presenting a puzzle which would defy the powers of a Kentucky lawyer to unravel. A London satirical publication endeavors to improve the occasion by suggesting the establishment of a "corps of moderately-educated board school boys to translate the language of the telegraph offices into English." On the face of the telegram, however, it is evident that not a little blame recoils upon the members of the press themselves. The telegram appears to be written in a very complicated way, and the original would take some time to put into readable shape, even by an experienced sub-editor. Reporters, from the rapidity with which they transcribe their notes, do not, as a rule, write like copperplate; and often without the least compunction place in the hands of telegraphists columns of "copy" on every conceivable subject, written in a style which only those acquainted with their caligraphy can read without hesitating at every line. On the other hand, it must, we fear, be admitted that sufficient care and attention is not devoted by the staff to messages for the press. Telegrams are often written in small and illegible characters, periods and capitals are omitted, words and lines are crammed together, while a portion of the message is frequently altogether lost by the doubling up or imperfect condition of the manifold paper.

In the enormous amount of press business transmitted of late years—often on wires interrupted by contact or earth currents, and scarcely workable, and which have been described by a wag of our acquaintance as nothing better than "clothes lines"—the wonder is that so few errors occur. The difficulties under which the operators labor in working long wires affected by atmospheric disturbances are not understood by the general public; and looking at the havoc among the wires by the storms all over the British Isles this winter, the press ought to be thankful that any service of news was supplied at all. On several occasions, when lengthy speeches or other matters have been "wired," letters highly complimentary to the staff for the accurate and speedy transmission have been received; and the *Times*, a short time ago, had occasion to speak in high terms of some telegraphists who forwarded numerous press messages in various languages correctly.

While making these remarks we are far from stating that operators are perfect. We venture to think that one source of complaint regarding press arises from the fact that operators, as a body, fail to keep themselves well versed in the current topics of the day; and something in the way of reading-rooms should certainly be established in connection with large offices. The relations between the press and the telegraph service are usually of a most cordial character, and many operators find their way to responsible positions in the "Fourth Estate of the Realm." This being so, piles of various newspapers which are usually destroyed after perusal at publishing offices, would, we have no doubt, be willingly handed over for the use of a "Telegraph Reading-room;" and with only eight hours duty per diem, the operators could surely pass an hour or two in self-improvement and pleasure. It rests with the members of the staff themselves to remove the stigma cast upon them, and by doing their work in a creditable manner, to earn the esteem of their employers, the respect of the press, and the confidence of the general public.—*London Telegraphist.*

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Telegraphy Thirty-one Years Ago.

Mr. W. R. Clum, chief operator at 145 Broadway, sends us a portion of the New York *Sun* of January 10th, 1846, in which we find the following paragraph, which may be of interest to OPERATOR readers:

THE MAGNETIC TELEGRAPH ROUTES are progressing with spirit. That between this city and Philadelphia, under the superintendence of Mr. Cornell, will, probably, be in full operation within a fortnight. The whole of the wires, etc., between this city and Lambertville, on the Pennsylvania line, about one hundred miles, are now completed. On Thursday last a series of experiments were made on the wire, which is laid in the bed of the river, from Harlem to Fort Lee. This was the only point on the whole line where any difficulty was anticipated, but the result of the experiments was most satisfactory—far beyond the most sanguine expectations of those engaged in its construction. On the Pennsylvania section, beyond Lambertville to Philadelphia, everything it is stated, is in a like state of forwardness. The wire between Springfield and Worcester will be completed by the 1st of February, and thenceforward from Boston to New York, at about the rate of twenty miles per day. This will complete the work early in March.

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Bulldozing.

An operator, a friend of mine, had a learner in his office by the name of Jimmy Snooks, a precocious lad of seventeen summers. After Jimmie had progressed a short distance on the mystic road of dots and dashes, he began to think himself quite a star in the telegraph firmament. Several operators from a distance held a consultation concerning this wonderful plug, and unanimously agreed to "test" him. Their wily brains soon invented a plan. It was agreed to send him a message. My friend was let into the secret, and at the appointed time some one might have been heard calling the office vigorously. Jimmie soon answered by permission, and proceeded to take the prospective message, which read as follows:

SQUEDUNK, Fla., 25th.

To Henry Lightning,
Care William Arrester,
Bulldozerville, N. C.
Cantmaketheelectionreturnscomeoutright
J. Dontsuitme.
1 Pd

Jimmy kept telling the sending operator to "go ahead period" for twenty-five minutes, but at last gave it up in despair. The operator in charge offered to help him out, and after an exchange of agreed signals sat down and took it right along as he had a duplicate in his pocket. Jimmy says he never did like these Government ciphers.

BLUE GLASS.

◆

Dashes Here and There.

A STRAIT LINE OF CONDUCT—A telegraph wire

A TELGRAPH battalion is about to be added to the German military railway regiment.

THE INDO-EUROPEAN TELEGRAPH COMPANY.—The average time in transit from London to India of *all* outward messages during the week ending March 30th, 1877, was thirty-five minutes.

A RUSSIAN engineer has invented a bombshell tower, which is moved about by steam, and in which artillerists sit, and pelt the enemy with destruction. By the time the next war breaks out the warrior will sit in a rocking chair in the front parlor of a hotel, and talk his enemies to death with a revolving telephone.—*Hawkeye.*

THE first regular telephonic line has been put in operation between the place of business of C. Williams, Jr., Boston, Mass., and his residence in Somerville, a distance of about three miles. Mr. Williams states that it works well, and that "conversation can be carried on by it nearly as well as if those conversing were in the same room."

OUTPOST TELEGRAPHY.—The English firm of Siemens and Halske has submitted to the German Government a new invention, which has already been pronounced by the war office to be of practical utility. It is a telegraph for outposts. The soldier on outpost duty will be able to carry the apparatus in his pocket, and easily communicate with the next field sentinel.

TELEGRAPH CHANGES IN NEVADA.—The old Nevada and Northern Telegraph Company, whose lines extended from Winnemucca to Idaho and Eastern Oregon, having been sold out by the men who built the line, the purchasers have re-organized under the name of the Pacific Telegraph Company, and assumed control of the wires. Mark L. MacDonald, of San Francisco, is President; R. H. Minister, Secretary and Treasurer, and F. L. Vandenburgh General Superintendent of the new company. The wires are to be extended to Portland and all the principal cities of Oregon. The Atlantic and Pacific Company, with whose wires the Pacific Telegraph Company connect at Winnemucca, have purchased or in some manner gained control of the Deseret Company's lines in Utah and Southeastern Nevada, taking possession of them May 1st. This breaks the connection of the Western Union with Pioche and Southern Utah.

POLES and wire of the Atlantic & Pacific Telegraph Company have begun to arrive and will soon be at work. Mr. W. E. Smith, formerly W. U. manager at San Diego, will supervise the general business here of the company, and act as A. & P. manager. Mr. J. B. Allen, now railroad agent at Dos Palmas, will attend to the telegraphic business of the railroad company, and also act as freight agent at the temporary crossing below town. Instruments and supplies have been received. The A. & P. have pursued such a liberal policy in regard to rates, that such of us as are not millionaires may now hope to communicate by wire with our friends in the States.—*Arizona Sentinel.*

KILLED BY LIGHTNING.—During a severe lightning and thunder storm at Newberne, N. C., last week, three young persons, Isaac Richardson aged twenty, Eliza Collins, twenty, and Laura Williams, nineteen, were struck by a heavy discharge of electricity, and instantly killed. Richardson was escorting the two girls, arm and arm, from church to their homes, and as they neared Queen Street, a gentleman who was but a few feet behind, saw them fall as the flash struck them. The coroner found the lifeless bodies lying side by side, with arms still locked. At the time of the accident they were walking under a steel-handled umbrella, which was found lying upon the ground near the bodies (the cover partially burned), and which, undoubtedly, was what attracted the electric discharge.

AN ERROR THAT COST A LOSS OF $50,000.—James G. Ross, of Toronto, lost $50,000 by the incorrect transmission of a telegram that he gave to the Western Union Telegraph Company in this city. He telegraphed to Ker & Co., of the Island of Luzin, Manila, for 3,000 bales of hemp, paying $118.37 in gold as the tariff on the message. The message as delivered conveyed an order for 8,000 bales of hemp. The company's answer was that the mistake occurred on a connecting line beyond Heart's Content, and the defendant was not responsible. The plaintiff last Saturday, asked leave of Justice Pratt to discontinue the suit, offering to pay taxable costs and disbursements. The defendant's counsel. opposed unless an extra counsel fee of $2,000 was granted. Justice Pratt reserved his decision.

STRANGE ELECTRIC PHENOMENA.—The city was interested, last evening, by the appearance on C Street of a strange phenomena. At first they had the appearance of sparks of fire coming up through the pools of water beside the street. These sparks seemed to explode on reaching the surface, in many instances producing reports loud enough to be heard across the street, and being accompanied by a little cloud of smoke, and emitting a decidedly sulphurous smell. It was noticed that the phenomena occurred only on one side, under the telegraph wires. The sparks seemed to be caused by drops of water falling from the wires of the telegraph, which exploded when striking the pools of water. This solution was seemingly confirmed by the fact that when the wires became dry the phenomena ceased. It still remains to be explained, however, why, under the circumstances, such results should follow the falling of the water drops from the wires.—*Virginia City Enterprise.*

SAN FRANCISCO NOTES.—Mr. C. T. Devier, Western Union manager, has resigned. He has the most sincere wishes of the fraternity here for his future prosperity wherever he may [illegible]. Flem Drake, the newly appointed manager, entered upon his duties May 1st. The company could not have made a better selection, or one that would have given more entire satisfaction to the "third floor." He is assisted by the able chief "Bob" Hamilton. Both are "old timers" and experienced men, and will do their utmost to advance the interests of the company. Billy Glover, "night chief," performs his duties ably, and to the satisfaction of his superiors. Mr Frank B Rae, recently from New York, makes a valuable addition to our force. John Curran has been appointed Superintendent of Fire Alarm, [illegible] Urquhart, discharged. It is a matter of satisfaction to the community to know that they have so capable and trustworthy a man filling that position. Buck Kenny has resumed his old seat, his sojourn at Los Angeles seems to have agreed with him. Powers as heavy weight may take a back seat since J. Donnelly of Virginia City made his debut. Mr Vernon, late manager of the Stockton office, shaken the dust "of that city of the insane," from off his feet, and turns his face joyfully toward SF. and Ed.

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THE
OPERATOR
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY

W. J. JOHNSTON, - - - Publisher.

May 15th, 1877.

THE English Postal telegraphs have at last reached a paying basis. The expenses last year were ninety nine per cent of the gross receipts.

The first of Mr. Van Hovenbergh's scientific articles will be found in another part of this paper. Every one should carefully read these articles. They will be found very interesting, as well as instructive.

Mr. J. M. Maclachlan, author of "Was She Wrong?" recently published in THE OPERATOR, and a "Perilous Christmas Courtship," in Lightning Flashes, is the new editor of the London *Telegraphist*.

THEY had a fire in the St. Louis Western Union office last week. Egress from the operating room was cut off, and several of the operators escaped by lowering themselves by a rope to the adjoining buildings. Some had their hands burned in descending the rope. One man fell some distance, but escaped serious injury. The entire loss was about $50.

PROF. BELL is to lecture on his Talking Telephone in this city on the 17th, 18th, and 19th inst. A private exhibition of the apparatus was given in the St. Dennis Hotel, in this city, last Friday evening. General Eckert and other telegraphic lights were present, and conversation was carried on between the hotel and the A. and P. office in Brooklyn to the evident delight of those present.

Mr. H. C. FISCHER, Controller of the Central Telegraph Station, London, and Mr. W. H. Preece, Divisional Engineer, who left Liverpool on Saturday, April 14th, for the purpose of examining into and reporting upon the American systems of telegraphy, arrived at New York April 24th. They will remain in the country for some time, and visit most of the large cities. The Postal Telegraph authorities are also about to send out Mr. Sivewright, Superintending Engineer, to the Cape of Good Hope on a similar mission.

IT was expected that Lightning Flashes would have been ready some weeks ago, but the book is very large, and we found that to rush it out would not give satisfactory results. Great pains have been taken all along to make an interesting and readable book, and to keep it free from errors. It is now in the bindery, and will be ready some time during the present week. Copies will then be promptly mailed to those whose subscriptions have been received. We are certain that the subscribers will be so pleased with the work when they see it that they will excuse this unavoidable delay.

Professor Bell's Talking Telephone.

A correspondent asks, "Do you think that the telephone will take the place of the telegraph now in use?" As the question is one which a great many are now asking, we would say that we do not. It may, perhaps, supersede the Morse system to some extent for private lines and the like, and, possibly, may be utilized somewhat in forwarding press reports; but for regular commercial telegraphing, it does not appear to us to possess, as it now stands, any advantages. In the first place, messages would require to be taken down in short hand by the receiving operator, and afterward copied in long hand; and we all know the liability to error, not to speak of the great delay, of such a system. Then, again, while "Auld Lang Syne," "Home Sweet Home," or anything with which we are perfectly familiar, could be very easily recognized, it is questionable if regular messages could be "telegraphed" without serious errors occurring. It is very much like talking through the little toy "lovers' telegraph," or an ordinary speaking tube. If great care is taken to speak slowly and distinctly, and you have an idea of what is coming, you can generally make out enough to understand what a person is talking about. But it seems to us that nobody would care to trust important messages, sometimes involving life and death, or thousands of dollars, to being sent in this manner. We chronicled, issue before last, a ludicrous mistake made in just this way. A reporter telegraphed over the *police wires* to the editor of a Brooklyn paper that he was at the lunatic asylum, where he had gone on business, and could not get back in time for the afternoon edition. The sergeant told a policeman to step around to the newspaper office and inform the editor that Koselowski (the reporter) was at the lunatic asylum. The policeman misunderstood the message, and reported to the editor that Cardinal McCloskey was insane, and had been removed to the lunatic asylum. It is not too much to expect that just such mistakes would constantly occur were the telephone in use for commercial telegraphy. For the above reasons we do not think that telegraphers need have any fears about the telephone usurping, to any great extent, the place of the system handed down to them by Professor Morse.

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Progress of the Quadruplex Lawsuit.

At the date of our last issue Mr. F. A. Edison occupied the witness stand, which he retained until Wednesday afternoon, 9th inst. His evidence was very interesting, and threw light on many points concerning the Quadruplex that have been hitherto vailed in darkness. He was succeeded by Mr. J. C. Reiff, whose testimony related principally to the relations between Mr. Jay Gould and the respective parties concerned in the various agreements. Mr. Reiff left the stand Friday evening, and was to have resumed it, and to have finished his evidence, the following Monday, but was prevented by illness, whereupon the plaintiffs placed Mr. H. Van Hoevenbergh upon the witness stand to testify as an expert as to the precise manner of applying the Quadruplex to the automatic. Mr. Van Hoevenbergh was relieved Wednesday afternoon by Mr. D'Infreville, who supplied further evidence upon the same point. Friday noon, Mr. Reiff was recalled, having recovered from his illness.

It is too early in this case to give even a conjecture as to the result. Both parties seem to have fully organized their forces, with the determination to fight the battle to the end.

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An Exhibition of Professor Bell's Telephone.

The exhibition given at Hartford on the evening of Friday, April 27th, afforded a much desired opportunity to examine the above invention. Entering the auditorium of the Opera House, the most prominent object was a regulation telegraph pole set up in the center of the place usually occupied by the orchestra. On the stage behind this, a little to one side, was a small stand, on top of which was placed a sounding box about two feet square. On this again was one of the four telephones used, the others being suspended at different points in the room by means of wires attached to the ceiling; other wires radiated from the above-mentioned pole to each telephone. The telephone is a very simple affair. It consists only of a small oblong box about eight inches in length and five inches in depth and width. There is a hole two inches in diameter cut in one end of this box in which is affixed a mouthpiece shaped like a short and stubby trumpet. This is all that is visible. Inside of the box is a diaphragm made of parchment or thin metal stretched across and dividing it into two chambers. This diaphragm bears a thin iron disk, which acts as an armature on the poles, of a peculiar combination of a permanent and electro-magnet. When the disk is caused to vibrate, or move to and fro in front of the electro-magnet, a current of electricity is generated in the wire surrounding the cores of the latter exactly proportioned to the violence of the vibrations of the disk. Supposing two of these telephones to be connected by a wire, the impulses would pass to the electro-magnet of the receiving telephone, and acting upon the iron disk, would cause it and the diaphragm to make the same vibration that the first disk did, lessened, however, in strength by the resistance of the line wire. It must be understood that the sending and receiving telephones are exactly alike, and that no change in the arrangements or connections is necessary when desiring to speak, after having received a communication, or *vice versa*.

There is nothing new in the precise manner in which the current of electricity is induced, it being substantially the same as the mechanical "shocking" machine that are so well known. In one case the inducing armature or magnet is approached and withdrawn by means of a crank and gearing; in the other, by the vibration of an elastic diaphragm.

This telephone has the additional advantage of allowing a battery to be used, if desired, without making any change of the existing arrangements, except to insert the battery; and, in fact, the first experiments were performed by this means.

A similar system of telephones was arranged in a hall at New Haven, Conn., also at Middletown, and the three connected by the wires of the Atlantic & Pacific Telegraph Co., who kindly proffered them without charge.

The first experiment consisted in the transmission of organ tones from a cabinet organ at Middletown. Several tunes were played and quickly recognized by the audience at Hartford, who applauded them heartily, with justice. Each note was distinctly audible, and the effect harmonious and musical.

By means of a switch on the stand the tones were sent through the different telephones in the auditorium in succession. Full chords were then sent, in which the blending and harmony of the different notes could be distinguished. The stops of the organ were then used one at a time. The difference made by them in the sounds was easily recognized. The effect of the tremolo was particularly fine.

Immediately after this the batteries were disconnected, and Prof. Gower, who had charge of the performance at Hartford, held a conversation with Mr. Watson at Middletown, and Prof. Bell at New Haven, in the same manner and with the same ease as if the participants were but a few hundred yards apart, and connected by a speaking tube! Most of the responses were understood by the audience, to their great delight. Several songs were sung at Middletown, and were heard distinctly at Hartford. In many cases not only the tune, but the words were plainly heard. Three gentlemen at Middletown sang a trio, in which the three voices were easily distinguished.

The performance closed with a conversation between General Hawley in Hartford and Dr. Bacon in New Haven, which delighted and pleased those gentlemen as much as it did the audiences at the two places.

It is to be regretted that greater encouragement was not given to Professor Bell to repeat the exhibition, which was really meritorious. There were not above two hundred persons present in Hartford, though the audience in New Haven was somewhat larger. At Middletown only the performers and a few friends were present.

The machine itself is undoubtedly a great invention. Its great simplicity, the ease and perfection of its operation, and the fact that it *cannot* get out of order, combine to place it foremost among the useful discoveries of the age. What effect it will have on telegraphy it is hard to say. It seems particularly adapted to short lines, where the messages need not be transcribed. It can hardly prove a success on long lines, on account of the interference and induction from other wires on the same poles, and the difficulty in securing perfect insulation, which is necessary with this system.

The time would seem to be at hand when the present complicated and inefficient private line machines shall be discarded, and the merchant in his office shall communicate per telephone with the foreman of his factory, eight or ten miles away, as easily as he now does with his clerk on the floor above by means of the speaking tube. Haste the day! It cannot come too soon.

But Morse operators need not tremble for their situations just yet. All of the present duplex, quadruplex, multiplex, and automatic systems require old-fashioned Morse operators (and right good ones, too) for their successful operation. So Othello's occupation will be at his service for many years yet to come.

* * *

IT is a great many years since a telegraph company advertised for operators. The advertisement, therefore, of the A. and P. in last issue of THE OPERATOR attracted universal attention. Mr. Dealy informs us that he has already received fully five hundred applications, as many as seventy or eighty reaching him in a single day. He says he is fully satisfied that THE OPERATOR is an extraordinary advertising medium—too much so, he thinks, for it required a special clerk to file away and indorse the several applications. Forty operators have already been put to work at different points. As new offices are opened from time to time the company will require more men. Business is so lively at 145 that the operating room is becoming too small to accommodate the number of operators, although all the spare space is being utilized.

Entertainment and Ball of the Original Enterprise Dramatic Association.

If you have any curiosity to know how many rising young telegraphers there are in connection with the delivery and kindred departments in the Western Union Telegraph office in this city, outside of the strictly operating force, you should have dropped in at Turn Hall on Wednesday evening, May 2d. The occasion was the third entertainment of the Original Enterprise Dramatic Association, composed mainly of employés of the above departments at 197. The hall was crowded, and long before the curtain rose it was evident that, financially, the affair was a complete success. Perhaps it was this that encouraged the several candidates for dramatic honors to acquit themselves so creditably throughout the four very appropriate sketches selected for the occasion, as well as the songs and dances sandwiched in between. Misses Leroy, Brooks, Arden, Mullan, and Sinclair, and Messrs. Frost, Campbell, Smith, Rogers, Meldon, Foy, Stage Manager Lane, and several others deserve special mention in this connection.

At the close of the dramatic performance the hall was cleared for the ball, which was the crowning event of the night. Fully 150 couples joined in the grand march. Among the denizens of 197 present, each, of course, accompanied by a lady, were noticed Manager John Dauler, Sergeant Henry Frey, P. Powers, P. Gries, W. Youdale, Doctor Hutchinson, J. Byrne, Thomas Gilson, Jack O'Keefe, O. Kennedy, M. J. O'Neil, W. J. McNamara, Bob Rogers, R. J. Plaatje, J. J. Mather, Lewis Dresdner, A. W. Maul, J. J. Dryer, P. Demsey, Murray Meldorr, L. J. Modoc, H. Diercks, W. A. Moore, Joe Meining, Charles Young, Charles Moran, and Robert McGill, of the delivery department; Ben Stevens, J. N. Applebaugh, and F. R. Clair, of the receiving department; N. T. Wilbur and D. C. Sullivan, of the treasurer's office; J. Veitch, cashier's office; James McParlan, Joe Dean, W. F. Lewis, and Chris Hinkeldy, of the operating room; Happy McGill, of M. S. R.'s room; C. M. Holmes and W. Cunningham, of the mail department; F. W. Maul, Peter Ritter, Thomas Lynch, John Engel, C. McCarthy, Michael Gordon, C. Stapleton, and L. Holcomb, of the janitor's department; W. A. Clark, W. A. Sherman, and W. Clark, Jr., of the chief engineer's department; Thomas Singleton, Harry Lockwood, and Thomas Gillespie, of the auditor's office; Matt Ryan, James Dorsey, and Thomas Hamilton, lunch room; George Cole, Edward Curran, Michael Roche, and William Donovan, of Z office; Thomas Murphy, of MS office; J. J. Callahan, of SD office; D. J. Dowling, of Direct Cable Company. The following associations were also represented: Manhattan Dramatic Association, Henry Frey Association, Piccadilly Social Club, Rockaway Pleasure Club, St. Peter's Literary Union, Enterprise Base Ball Club, United Social Club.

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Echoes from 197.

Mr. W. G. Macgowan has been transferred from the Western Union office in the Post Office, and placed in charge of the new office in Broad Street.

They have organized a very efficient fire brigade in the main office. Its members consist of the attachés of the janitor's department, who are drilled every week, and make very apt firemen.

The original Morse telegraph instruments, cuts of which appear in Benson J. Lossing's "Professor Morse and the Electric Telegraph," in "Lightning Flashes," have been placed on exhibition in the receiving department of the main office, and attract considerable attention.

There is a young lady telegrapher in this city, a recent graduate, who answers to the sweet little name of Miss Helen Jacinta [illegible] [illegible]. Actual fact. The man who can pronounce that name deserves a chromo. Just imagine hard-hearted, cold-blooded, callous Superintendent Skinflint, peering over his spectacles at a lady with so euphonious a name, and offering her a salary of twenty-five dollars a month! Miss [illegible], however, notwithstanding the drawback of so [illegible] a name—which let us charitably hope may not always be what it is—is a very cultured lady, and gives promise of becoming an efficient telegrapher.

Themes for the Thoughtful.

Prayer is the key of the morning and the bolt a night.

Free souls freely work; whoever fears God fears to sit at ease.

The gates of heaven are low arched; we must enter upon our knees.

Except man rise and go beyond himself, he is exceedingly small.

Ambition is the germ from which all growth of nobleness proceeds.

To do our best when we know it can be only second best is noble.

The drying up of a single tear has more of honest fame than shedding seas of gore.

Bishop of Lonsdale's directions for "the way to heaven:"—You have only to turn to the right and go straight forward.

The greater the difficulty, the more glory in surmounting it; skillful pilots gain their reputation from storms and tempests.

Nature takes a plain human face and sets sweet thoughts and kindly impulses at work upon it, and it grows into a lofty beauty.

Who has a heart so pure but some uncleanly apprehensions keep leets and law days, and in sessions sit with meditations awful.

Men are found to be vainer on account of those qualities which they fondly believe they have than of those which they really possess.

We can console ourselves for not having great talents, as we console ourselves for not having great place. We can be above both in our hearts.

There is not one among us that would not be worse than kings, if so continually corrupted as they are with a sort of vermin called flatterers.

Never, under any circumstances, assume a responsibility you can avoid consistently with your duty to yourself and others. In other words, "mind your own business."

Folly consists in the drawing in of false conclusions from just principles, by which it is distinguished from madness, which draws just conclusions from false principles.

He seldom lives frugally who lives by chance. Hope is always liberal, and they that trust her promises make little scruple of revelling to-day on the profits of to-morrow.

Limit your wants. The must is hard, and yet solely by this must can we show how it is with us in our inner man. To live according to caprice requires no peculiar powers.

Home is not a name, nor a form, nor a routine. It is a spirit, a presence, a principle. Material and method will not and cannot make it. It must get its light and sweetness from those who inhabit it.

I look upon every man as a suicide from the moment he takes the dice-box desperately in his hand, and all that follows in his fatal career from that time is only sharpening the dagger before he strikes it to his heart.

Like flakes of snow that fall unperceived upon the earth, the seemingly unimportant events of life succeed one another. As the snow gathers together so are our habits formed. No single flake that is added to the pile produces a sensible change, no single action creates, however it may exhibit, a man's character.

Those who are in the power of evil habits must conquer them as they can—and conquered they must be, or neither wisdom nor happiness can be attained; but those who are not yet subject to their influence may, by timely caution, preserve their freedom: they may effectually resolve to escape the tyrant, whom they will very vainly resolve to conquer.

Night after night we die, and are born again. We lie down in our bed as in the grave, and the time comes when we lie down in the grave as in our bed. But, as Dean Milman wrote:

It little matters at what hour of day
The righteous fall asleep. Death cannot come
To him untimely who has learned to die.
The less of this brief life, the more of heaven;
The shorter time, the longer immortality.

Scientific Department.

This Department is under the charge of Mr. H. Van Hoevenbergh, to whom all communications relating thereto should be addressed. Mr. Van Hoevenbergh will cheerfully answer any questions pertaining to electricity, magnetism, or kindred subjects.

ELECTRICAL MEASUREMENT.

I.

These two rather lengthy words have long acted as a sort of bug-bear to operators in general, tending to frighten or dishearten them, and prevent their obtaining a knowledge of one of the most interesting processes pertaining to their calling. A glance at them brings to the mind long, closely printed, unintelligible articles, interspersed with strange and unknown characters, supposed to be algebraic, and teeming with mysterious allusions to equations, aliquot parts. I would not, for the world, insinuate that the heavy scientific gentlemen, writers of articles such as these use an unknown language purposely, in order that their business may be kept in their own hands, and that no one may understand it except those fortunate enough to possess a college education. Oh no. But that is precisely the result attained, whether purposely or not.*

The men who do the great bulk of telegraphic work have had neither the time or the opportunity to acquire such a knowledge of algebra as would enable them to understand the terms used, which are in many cases unnecessarily technical and obscure. Shall they therefore be shut out from an understanding of this art? Surely not. It is manifestly absurd and unjust. Many of the problems, and processes used in measuring resistances, can be expressed with sufficient clearness without the use of algebra, and in such terms as to be intelligible to all possessing a knowledge of the ordinary rules of arithmetic. This, then, shall be the scope and purpose of this series of articles.

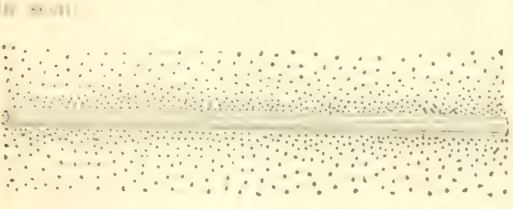
When the two poles of a cell of battery are connected by a piece of thick, copper wire, the strength of the current produced by that cell is at its strongest. But in order to get work from that battery, we must insert some machine or appliance, usually an electro-magnet, into the circuit. This will weaken the current in exact proportion to the resistance offered to its passage by the wire surrounding the core of the magnet. This important fact was observed by Professor Ohm, and is known as Ohm's law. It is usually expressed as follows: "the strength of a current of electricity equals its force," (as originally derived from the battery) "divided by the resistance" (in circuit).

If we can ascertain, then, the exact amount that the current is weakened, we shall have learned the resistance of the magnet, as, if we can find out the amount of strength required to lift a stone from the ground, we shall have the weight of that stone.

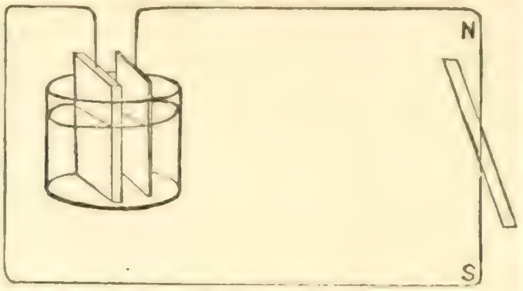
How can this weakening of the current be observed and measured?

The answer to this question comprises the Art of Electrical Measurement.

To clearly understand this process, we must return to our cup of battery and its conducting wire. When the current from the battery flows along this wire, a magnetic influence is thrown out from it, which, if it could be made visible, would probably look like a mist very thick close to the wire, and getting thin and attenuated as it leaves it, until, at a very short distance away, none whatever would be seen.

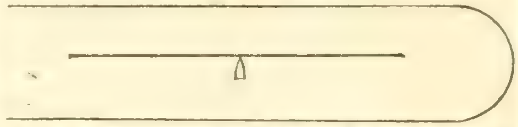


The above illustration gives a very good idea of this influence, which is the same as, or closely allied to that exerted by the poles of a magnet. Suppose the wire from the battery to be stretched north and south, and a delicately suspended steel needle, magnetized, brought up under it close to the wire and into the influence mentioned above. When the battery current traverses the wire, the needle will swing to one side or the other, tending to place itself across the wire, as in this drawing. If



the north end of the wire be connected to the zinc pole of the battery, the north end of the needle will turn to the west. If the needle now be placed over the wire, or if the battery be reversed, the north end of the needle will swing toward the east.

If the wire be bent around the needle thus:



the effect upon it will be nearly doubled. Nearly, not quite, because the nearer the needle swings toward a position at right angles to the wire, the more power is required to move it, and the farther its poles, when the magnetism is strongest, are from the wire. If the wire be wound round and round the needle in the shape of a flat hollow coil, the effect upon the needle would be perceptibly increased by each turn, up to a certain point. As the farther the wire is from the needle the less it effects it, a point is soon reached where the effect is imperceptible, and the addition of more wire would put useless resistance in the circuit. This arrangement would now contain the essential elements of a galvanometer. The word needle, used in relation to electrical instruments, it should be remarked here, means simply a suspended or poised piece of steel, which may be round, square, oblong, or any other shape suited to the work it has to do.

When the needle is suspended at a fixed distance from the wire of the coil, the amount of its deflection depends on the strength of the current sent around it.

Before it can be shown how this fact is applied to electrical measurement, a galvanometer of some sort must be provided. The next article of this series will be devoted to the construction of a simple and cheap, but tolerably efficient instrument of this kind.

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* It must not be understood as decrying the use of [illegible]. What I do object to is [illegible] intended for the general [illegible] of operators, [illegible]

PROF. ANTHONY'S ELECTRIC LIGHT EXPERIMENTS.

Professor William A. Anthony, of the Physical Department, Cornell University, sends us the following interesting account of his recent experiment, which we briefly noticed on page 289, current volume. In that notice the lamp used for comparison of light values was incorrectly designated as the one used in the engine. Professor Anthony says:

"The following is a brief description of my experiments: To the electro-magnetic machine, which was driven by a Brayton petroleum oil engine of five horse power, wires were connected for conveying the electricity produced to a room some 300 feet distant, from which daylight could be excluded, for photometric experiments. In this room, the wires were connected with a Foucault regulator for the electric light, the light being produced by the passage of the electric curve between two carbon points. The electric light being too brilliant for direct comparison with the standard candle, I took from my house a common coal oil lamp, having a flat wick one inch wide. The electric light was found to be equal to what would have been produced by 234 such lamps. But 234 such lamps would have consumed nearly 16 lbs. oil per hour, while the engine, whose power developed the electric current, which in turn produced the electric light, consumed but 6¾ lbs. oil in the same time. This fact was stated in the paper giving the results of my experiments merely as showing, in a striking manner, how very small a proportion of the energy of combustion of the oil in the common lamp is utilized as light."

NATURE OF ELECTRICITY.

A new hypothesis as to the nature of electricity (we learn from *[illegible]*) has been offered by Professor Rénard of Nancy. He considers an electric current to be produced by longitudinal motion of the ether particles, which, at the same time, have a general forward motion. When the molecules of a body are surrounded by a greater ether atmosphere than the normal, the body is in the condition which we call positively electric; when the ether atmosphere about each molecule is less than the normal, the body is negatively electric. He has sought to explain various electrical phenomena thus; for example, the magnetization of steel needles by electrical discharges, regarding which, Savary has shown that, according to the position of the needle, it acts in one direction or the other.

Only a Woman.

She was a telegraph operator on one of the great railroad thoroughfares that run east and west through our country. Hers was a busy office, with many wires to watch and train orders almost innumerable to be received. The number of her messages often exceeded a hundred during the day. A casual glance at the office revealed only a lady-like person sitting there; but if any one had occasion to address her, or made an excuse to—as was often the case—they were always treated courteously, and received the desired information at the first possible moment. But to us who had known her, say, for eight years, she was much more than "lady-like." To us she was a woman we had seen develop from girlhood and ripen into a womanliness that was all true, pure, and sweet. Eight years or more of business that brought her almost constantly in contact with men had not tinged her with one shade of masculinity. She was as refined and delicate in nature as the dainty dames who know only parlor life. Never one taint of boldness she knew. She unconsciously refuted in herself all the objections the world has made against a woman occupying such a position. Living twelve hours a day in a depot for eight years, during two of which she was a city night operator, obliged her to witness many phases of people's lives certainly not their best. Aided oftentimes by that charity which "thinketh no evil," so perfectly and literally did she "mind her own business" that no charge of tale-bearing or gossip could be laid at her door.

We saw her under a wide range of circumstances: when the weather was stormy and lines worked badly or not at all; when business pressed discouragingly; when sickness—to which we men would have succumbed and "laid off"—made work doubly hard; when care and grief for others weighed heavily upon her; when the shadow of death encircled her home again and again; when temptations to impatience and anger were many, and we never yet saw her conquered. However much or often others forgot themselves, she never forgot the courtesy and forbearance that were her characteristics. One phase of her Christianity was her cordiality and impartial kindness to all classes with which her business brought her in contact; a suavity that yet had in it something that made men keep their proper distance. Men that never spoke to her held her in profoundest respect and admiration. It was refreshing to the weary men, begrimed with engine soot or the dust of travel, just to see that girl sitting there in her fresh, clean dress, with beautiful hair and calm, pleasant face. And when with years they came to know that her kindness and politeness were unvarying, and that in the grooves of her armor of Christianity there was no flaw, there became mingled with their admiration and regard for her as a woman a reverence that was beautiful to see. I know men who think better of all womankind for knowing this girl. I am sorry I must not point her out, that she may receive the recognition and honor she so richly deserves; but it would be greatness thrust upon her, as she is quietly and bravely accepting the life of labor which duty seems in her sternness to have imposed upon her. My excuse for writing this at all is the hope that some woman who reads it may perceive the lesson there is in this noble life, feeling sure that when one realizes all that a grand, true woman can be in the world, and what a kingdom, a power, and a glory is hers, she will never say, "I wish I were a man."

E. C. DANA.

AN old lady once wrote a letter to the department asking them to remove the wires which had been attached to her chimney, and said: "I must request you to remove your wires from my chimney immediately. The noise the message makes going along the wires is sometimes awful, and sometimes—I suppose when the clerk has a hard word to spell—I declare it quite shakes the house.—*Telegraphist*

Chicago W. U. Items.

When the reported marriage of Mr. J. N. Crittenton became a settled fact, it created considerable stir among the society portion of the fraternity here. Mr. Crittenton had led the life of a bachelor for so long, that nearly every one had made up their minds that he did not exactly believe "that it was not good for man to be alone." We hope you will bear with us for asking space in your columns for a brief account of the ceremony, as Mr. Crittenton is one of the oldest operators in the service here. The marriage took place April 18th, as per notice sent you. After the wedding ring had been placed upon the bride's finger, an elegant and complete copy of the Holy Bible was presented to the bridegroom by the officiating clergyman, on behalf of some sixty or seventy employés of the Western Union Telegraph Company at Chicago. This was a very unexpected gift, and, coming as it did from Mr. Crittenton's co-laborers, many of whom are highly esteemed, and have been the objects of prayerful solicitude, his feelings can better be felt than described; suffice it to say, it awakened the deepest emotions. After prayer, the party passed down the aisle to the carriages in waiting, while the sweet strains of music which greeted their entrance, and continued in a low tone through most of the ceremony, changed to a wedding march as they made their exit. The pair left Marshall the same day, and immediately repaired to their residence, 31 Gold Street, where they will be pleased to receive their friends.

OCCASIONAL.

A Western Union Chief Operator Encouraging Plugism.

Another modern humbug has been in operation in Kansas City for the past nine or ten years, and no mention has been made of it in the telegraphic papers. It is known and advertised as "Spalding's Commercial College and Telegraph Institute," and was established in 1867 or 1868. They do a flourishing business, their victims being mostly young men and women from the country towns. They "manufacture" from five to six hundred "first (?) class operators" per year, whom they promise (before they pay $45 to learn) from $75 to $100 per month. It is upheld and taught by W. U. officials, the manager and chief operator of Kansas City Western Union office being at the head of it. It is conducted on the same principle as the rest of its kind, having wires running from one room to another. The students invest in a manual of telegraphy, then spend from four to six months in practicing, and go home wiser (though not telegraphically) and, it is to be hoped, better men and women.

SUBSCRIBER.

Joys of a Counry Operator's Life.

When I think of the fun city operators make of us poor country plugs, I feel like giving them one phase of a country operator's life. When they become capable of running a country office, they have to deliver messages perhaps two or three miles distant. It is like starting from a clump of trees and proceeding to Blue Jay, from thence via a hive of bees in swarming time, and by way of three hundred foxes with fire brands in their tails, over roads so crooked that a man must be very drunk indeed to follow. Finally you find the old farmer, and ask him for a quarter to clean your battery—your tongue. He will cast up that eye of his with grave irony and a peculiar twinkle and ask you if you can't take it out in buckwheat or buttermilk, and if that isn't enough you can sit up with Hannah Jane, and he will pay for the oil!

And then after you have worked in that office for about three years, and your constitution has become broken down, you will receive from the magnanimous W. U. Tel. Co. a note reading, "Your services are no longer required." Who wouldn't be a country operator?

HAYSEED.

Albany, N. Y., Notes.

A new branch office has been opened by the W. U. in McCammon's music store, corner Broadway and North Ferry Street, in charge of Mrs. J. H. Nelson. Messages for that section of the city are delivered from there. The A. and P. wires were removed from the Delavan House May 1st, and the W. U. wires immediately run in, and an office opened in charge of Mr. Eugene Gay, who has very successfully managed the office for the past three years under the A. and P. The reduced rates and the lengthy session of the Legislature gives the boys in both A. and P. and W. U. offices considerable to do. The W. U. force has been increased by the appointment of Mr. George Lounsberry. At the time the new W. U. office was opened, the operating room was pronounced too large. The hitherto vacant space has just been taken by two new quartette tables, and now the cry is: "if we should need another, where could we put it?"

XYZ.

Lightning Flashes and Electric Dashes.

Under this title Mr. W. J. Johnston has just published a book, which we think will meet with general acceptance from telegraphers, and from many who are not engaged in telegraphic business or service. It contains interesting stories of telegraphic experience and adventure, and is illustrated with numerous mirth-provoking sketches by Mr. J. J. Calahan, whose ability as a caricaturist was brought prominently forward by his well-known and amusing caricatures of the Telephone and its working. Among the numerous contributors to the work are Messrs. J. D. Reid, W. P. Phillips, (John Oakum), Ralph W. Pope, Charles Barnard, and other well known writers. Mr. Benson J. Lossing furnishes an article on Professor Morse and the Telegraph. This article is well illustrated with representations of the first recording instrument, likeness of Professor Morse, and of his home at Poughkeepsie. This contribution to telegraphic literature will, we have no doubt, be kindly received and welcomed.—*Journal of the Telegraph.*

PERSONALS.

Bert Allen, an "old timer," is sojourning at Kansas City.

Mr. George P. Dunlap is with the Dominion Tel. Co. at Paris, Ont

Mr. L. H. Munson is operator and ticket agent at Madison, N. J.

Miss Mina Coolbaugh is manager and operator D. L. and W. R. R. depot at Hoboken.

Mr. John R. Rowe will confer a favor by communicating with his brother James, at 197 Broadway.

It should have been M. Atwood, but somehow he got it down "Mattwood." He wood—n't have done it for a dollar.

Mr. Q. A. Stephenson formerly of Palisade, Nev., has accepted the position of agent and operator for the Eureka and Palisade P. R. Company, at Eureka, Nev.

Miss Nina Hickok holds the position of operator at Oxford, Mass. Kindness to all seems to be her motto, and she is correspondingly popular on the wire.

Mr. H. L. Deacon has been promoted from night operator to day operator in the dispatcher's office at Carlin, Nev. Mr. C. L. Clark takes the night trick same office.

D. E. Martyn, J. A. Stark, and Tom Gavan, were added to the W. U. staff at Kansas City last week, on account of the heavy increase of business at that point.

Telegraph communication was opened between Carson City and Glenbrook, Lake Tohoe (Gem of the Sierras), April 25th. T. W. Bunce acting as operator at the latter place.

Mr. W. L. Apgar, formerly operator at Orange Junction, N. J., has been transferred to Orange office. Mr. W. J. Brotherson who had charge of that office, has gone to Summit, N. J.

Miss Ida Honey, recently in charge of the Atlantic and Pacific telegraph office at North Adams, Mass., has been married to M. B. Webster, of Rome, N. Y. Sweet name for a bride, isn't it?

W. H. M. Cobb has been appointed agent and operator at Empire, for the N. and T. R. R. Co., T. F. O'Rourke, the present incumbent, having been transferred to Silver Switch, where his duties will not require so much mental exertion.

Miss Ada W. Patrick, of Chicago, who has been quite ill for the past six weeks, has made her friends glad by her complete recovery, and has again taken charge of the telegraph interests of the Star Union Line office, corner Canal and Van Buren.

F. C. Reed, 287 Bowery, New York City, is chief operator for the P. R. R; T. C. Douglass is operator at 21 Courtland Street; E. Holland and F. M. Huntington at 526 Broadway, the repeating office for New York City; George R. Van Zant at No. 1 Astor House; George H. Morris, at Pier No. 1, North River; J. S. Coolbaugh at Pier 39 North River.

J. P. Bingley has resigned his position as day train dispatcher of the Truckee Div. C. P. R. R., at Wadsworth, Nev., and sails on the 16th, via Panama, for New York. He intends going into business for himself at an early day. Mr. J. C. Hanchett, of Carlin, Nev., has been promoted to the vacant position. Mr. J. S. Hunter has been promoted from night to day dispatcher at Wadsworth.

General Superintendent J. C. Hinchman, of the Western Union Telegraph Company, accompanied by district superintendents A. S. Brown, of New York, C. F. Wood, of Boston, and G. W. Gates, of White River Junction, Vt., visited North Adams, Mass., last week. The object of the visit was to decide whether a cable wire should be laid through the tunnel at that point.

John B. Shine, formerly of Easton, who has had charge of the Western Union telegraph office at this place upward of three years past, is about to leave for Iowa, where his parents reside. During his stay in Pittston Mr. Shine has made a host of friends by his gentlemanly bearing and faithful attention to business, and the best wishes of all go with him in his emigration westward. His successor, as operator here, is Michael Mangan, recently of Binghamton. —*Pittston Gazette.*

Mr. Wm. L. Cullen, who, having been engaged as day operator in the Toronto M. T. office for the past seven or eight years, has resigned, and bade us all good-bye previous to his departure for Chicago, where he accepts a more lucrative position with the A. and P. Company. Mr. Cullen's gentlemanly bearing and genial disposition have secured for him a large circle of warm friends in Toronto, who all wish him every success in his new field of labor. Mr. T. Hurley, of M. T. Co., Ottawa, fills Mr. Cullen's place.

BIRTHS.

April 14th, at North Sydney, C. B., the wife of J. W. R. Thompson, of a daughter.

On April 30th, to George J. Davison, manager A. and P. telegraph office, Utica, N. Y., a son.

MARRIAGES.

GIBBS—SPARLING.—April 20th, at Toronto, Mr. S. E. Gibbs, chief operator Dominion Telegraph Company, to Miss S. J. Sparling, also of Toronto.

ALLEN—WARD.—April 25th, 1877, at the residence of the bride's mother, Mrs. E. A. Ward on Throop Street, Chicago, by the Rev. M. [illegible], Mr. Charles A. Allen and Miss Alida [illegible] Ward, both of the Western Union Chicago office. No cards.

CRITTENTON—BURGESS.—At Marshall, Michigan, Wednesday, April 18th, 1877, Mr. J. N. Crittenton, of the W. U. Chicago operating force, to Miss Lucina S. Burgess, of Marshall, Michigan. The ceremony was performed by the Rev. [illegible], in the beautiful little Baptist church [illegible].

DEATHS.

April 11th, 1877, at the residence of her parents, [illegible] West Madison Street, Chicago, Ill., [illegible] eight months and one day, only [illegible] A. L. Martin.

"Jack" has the heartfelt sympathy of his many friends in the Chicago Western Union office where he labors.

April 13th, 1877, at Battle Creek, Mich., N. Maynard, aged 68 years.

Mr. Maynard was the respected and honored father of H. C. Maynard, manager, [illegible] W. U. telegraph office, Chicago. A large circle of friends and relatives mourn his departure, as he was a useful and influential Christian man.

How the Western Union is Regarded in Florida.

[From the Savannah News.]

The Western Union Telegraph Company is mulcting its patrons in this city to pay its city taxes, by collecting an additional charge of ten cents on each dispatch paid for here until it is collected. Petty larceny would be comparatively respectable, if, as we suppose, it pursues the same course everywhere else. Congress should interpose its authority to control it.—Savannah News.

This is but another evidence of the grinding nature of the Western Union Telegraph monopoly. The widow and the orphan each pay their tithe and tax out of hard-wrought earnings. But the heavy hand of the W. U. Telegraph Company is laid upon the shoulders of its patrons with a demand to "stand and deliver," hence the burden felt by the widow and the orphan is to it a source of profit and gain. Doubtless a smile of satisfaction passes over President Orton's face as he thinks of it.

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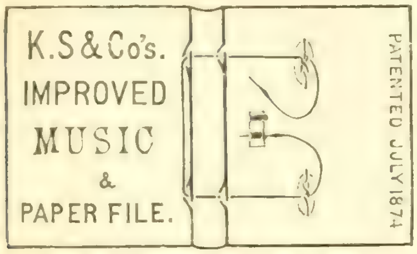

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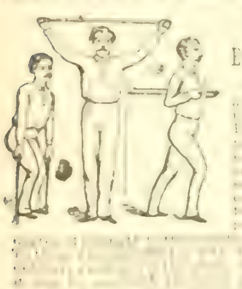

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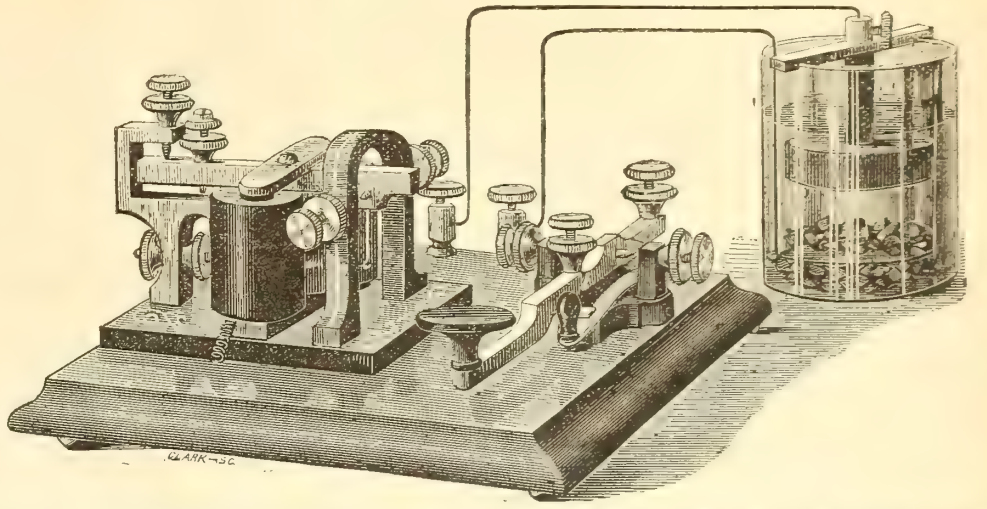

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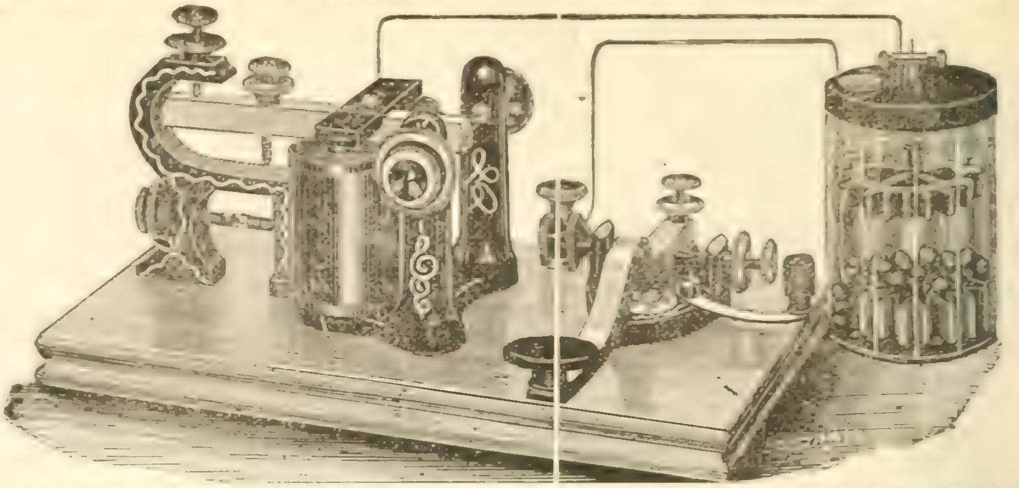

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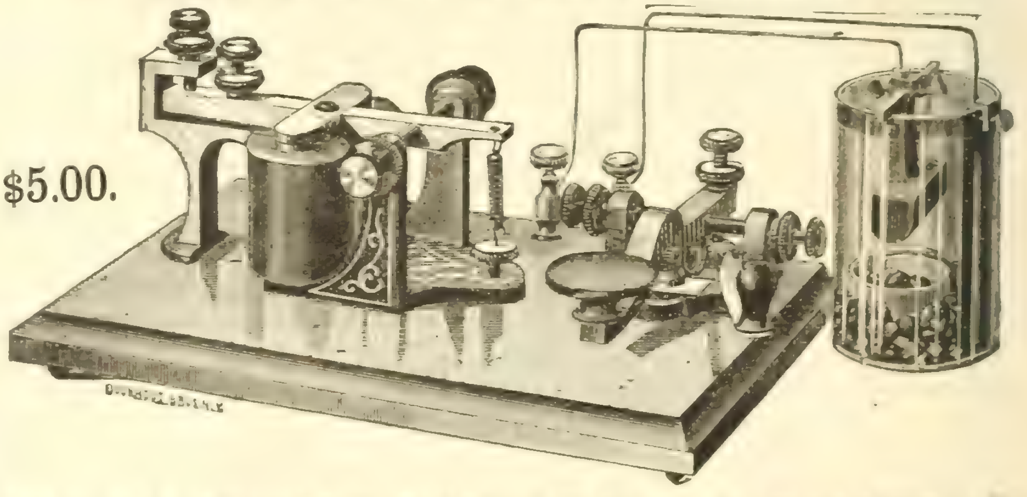

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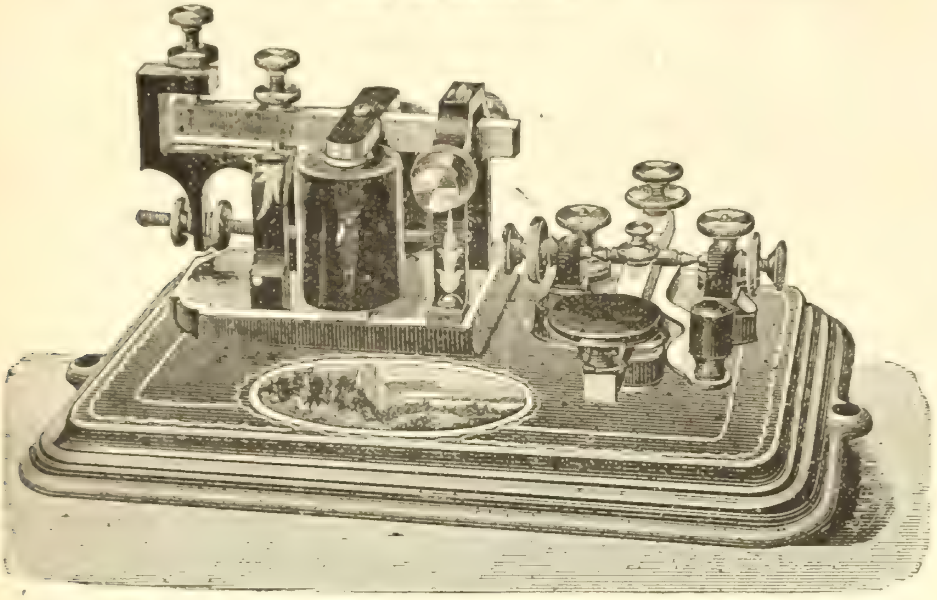

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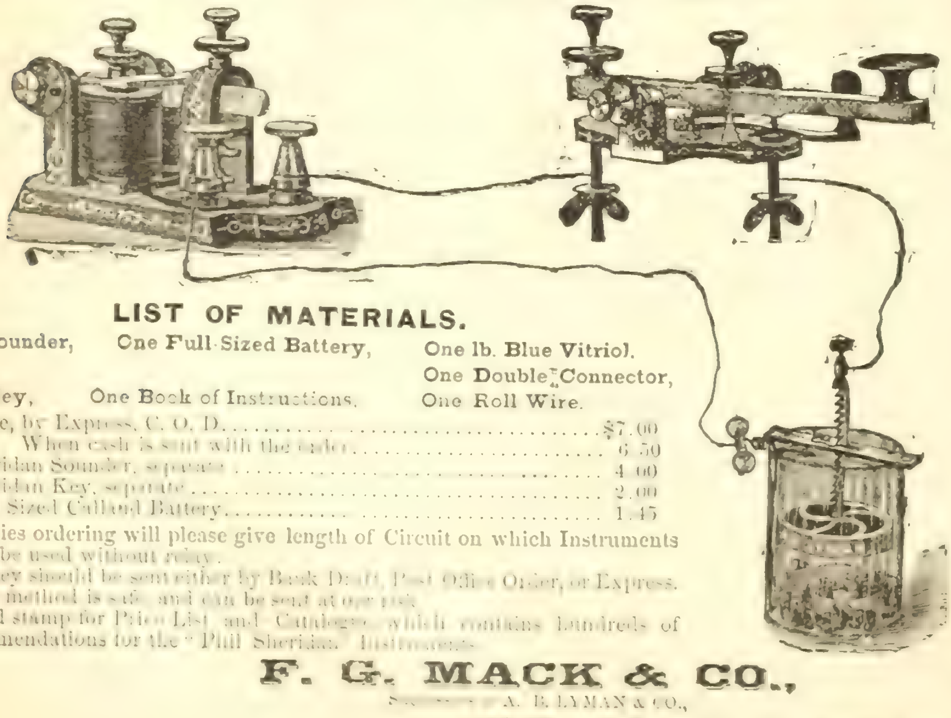

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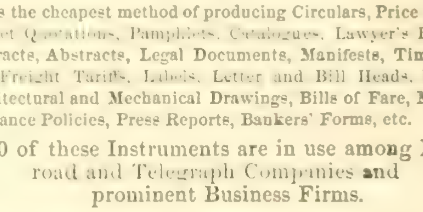

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June 1st, 1877.

Volume VII. **Whole No. 79.**

Cupid.

BY JOHN OAKUM.

I saw her all aglow,
She was sitting at the do',
On a chair;
And my heart was in a flutter,
As my lips began to mutter,
"Wondrous fair!"

She was rather fat and black
And she wore a greasy saque,
On that day:
So I knew she was the cook,
I knew it by her look,
And her way.

I was looking for a job,
And I thought I heard her sob,
Yes indeed;
And for days I sighed and pined—
I was absent in my mind,
And at feed.

It was just a week ago
That I first saw Missy Chloe,
But alas!
My appetite came back
And my heart did not quite crack,
Like a glass

The whitewash business opens
Much too brisk for love-like tokens—
It is spring;
In the trees I hear the thrush
As I ply my whitewash brush,
Let him sing.

It is well for me no doubt
That my passion has died out,
For ah! me,
My boys and wife at home,
On my nose would put a dome,
Don't you see?

They would laugh at me I guess,
If my thought I should confess,
And I blush!
Let the past be as a dream—
Jake, don't you hear my scream?
Pass dat brush.

—*Washington Capital.*

"Sic Semper, McGinnis."

In one of the eastern offices was a night manager, a pleasant-faced, cheery-voiced man, with dark brown eyes, which, to a casual observer, seemed ever grave and gentle. But those who knew him best, upon catching a certain mischievous twinkle in those seemingly honest eyes, were wont to say, "What is Jim up to now? I wonder who's the victim for the next practical joke?" For Mr. Gage was an inveterate joker, sans regard person or place.

One Friday night, last summer, while busy at the switch board, a tap on the shoulder attracted his attention, and turning, he saw an operator named Johnny Freshwell, commonly known to the boys in the office as "Freshie."

"Freshie" had been working the city line for some time, and often dropped in at night to see Jim. The latter grasped him warmly by the hand, as was his custom with all, and greeted him with: "Hallo! Freshie! what have you new to-night?"

"Well, I've been offered a good 'posish' out at Chicago, and intend starting Monday night."

"Indeed! Glad to hear of your success. Going Monday night, eh? S'pose you have a pass?" queried Gage, fingering rapidly on the switch board, while the twinkle which meant mischief was visible in his eye.

"No," answered Freshie, "but I would like to have one."

"Look here, Freshie," and Jim's voice assumed a confidential tone, "You ought to be a member of our society before you go West."

"What society is that?" inquired Freshie eagerly.

Without noticing the question, Jim continued: "We want just such men as you, good operators, men of experience and education; besides, it would be a good help to you in many ways. It's queer I haven't broached the subject to you before. It's immense! Just the thing for operators when traveling! One of the beauties of this order is that you can ride free on almost any railroad, because the conductors are in with us, and—"

Here Freshie broke in with: "What's the name of it? How many members? Where do you meet?" and a dozen questions all in a breath.

Button-holing him, and sinking his voice to a still more confidential whisper, Jim continued: "The name is Knights of the Key, and, being a very high-toned society, we meet around at the different houses. To-morrow night we meet at my house. You see, we don't take in everybody, but, being president, I'll use my influence, and think you can be 'taken in' to-morrow night, if you desire to join."

Of course Freshie was ready to join, in fact eager to do so. "What! travel on all railroads free! What a splendid scheme!" thought Freshie.

"Now, Freshie, I enjoin secrecy upon you. Come up to the house to-morrow night about eight o'clock. The initiation fee is a trifle, only ten dollars."

With many expressions of thanks to Jim for his disinterested kindness, they parted. One to build air-castles, and wake with a start from dreams of riding goats and roasting on red hot gridirons. The other remaining to perfect his arrangements for the morrow night by communicating his plans to some friends, who readily promised their presence and assistance.

On the following evening, Freshie presented himself at 561 Blank Street, and, upon ringing, was duly admitted. Proceeding upstairs, he rapped at the library door, where the impromptu club were assembled. Amongst them, such well known telegraphers as Billy Gove, Joe Wild, Harry Schotte, Charley Moore, and about a dozen others. His rap was answered by the question, "What strange plug knocketh on the door at this hour of night?"

"'Tis I, Freshwell, I desire to become a member of the 'Knights of the Key.'" The door was opened, Freshie at once blindfolded, and, amid the groans of the conspirators, led before the president, Jim Gage, who propounded the following questions:

"Plume from the outside world, did you ever, while getting 'sushed,' break more than once on a message, and bother the sender by asking if it was 'meat or meal,' and then say, 'you sent it that way?'"

"Yes—No—Yes," stammered Freshie.

"Miserable plug! Prepare the hot vitriol over the plug's head, and make ready the telephonic blue glass trumpet," thundered the president. Plumenasticus, did you ever, while taking press, tell a man to wait while you removed your coat, it being already off? Or, did you ever open the key, and say, 'can't hear, band playing outside,' when there was no band within ten miles?"

"No, sir—that is—a yes, I believe I have."

"Can such things be! Monstrous infamy! Now give him the degrees." With this, these fun-loving operators seized their victim. They tossed him in a blanket, put pieces of ice down his back, and pounded him with stuffed clubs, until he cried for mercy. Finally the president said, "Now toss him in the vat of boiling fluid, and if he be alive after boiling ten minutes he is a member of the 'Knights of the Key.'" Freshie went down on his knees, begged for release, and said, that "he didn't want to be a member of any such bulldozing society." Then Charlie Moore pleaded for him by saying, "I believe that according to the by-laws, if a plug be of a nervous temperament, we may omit the boiling degree, and as this plug has shown much nervousness, I move that we take him in without boiling." The bandage being removed from his eyes, Freshie paid the ten dollars, and was given the sign and password, which were, that when traveling, upon being asked by the conductor for his ticket, he was to lay his thumb aside of his nose, like old St. Nicholas in the Christmas poem, and say," Sic Semper, McGinnis, I've been boiled."

Early on Monday morning Gage went out to West Philadelphia depot to communicate the joke to his friend, Jack Johnson, conductor on the Pennsylvania R. R., formerly an operator in the same office with him. Jim purchased, with Freshie's ten dollars initiation fee, a ticket from Philadelphia to Pittsburg, and gave it to Johnson, who agreed to carry out the sell.

At 11.40 same night, Freshie started on his journey, intending to stop at Pittsburg a short time. He took his seat in the car, and, as the train moved slowly out of the depot, his face wore a complacent smile, in anticipation of a free ride all the way to Chicago. The train went thundering on, and soon Conductor Johnson came through collecting tickets. "Tickets! Ticket, sir," stopping at Freshie's side. "Now's my time," thought Freshie, and putting his thumb aside of his nose, with a knowing wink, he said softly, "Sic Semper, McGinnis, I've been boiled."

"Ah!" said Johnson, extending his hand in a fraternal way, "One of the society, I see. Glad to meet you. When were you 'taken in?'" "Last Saturday night," answered Freshie, offering a couple of "Harry Clays," and vowing the society the best in the world. After a few hurried words, Johnson passed on, inwardly convulsed with laughter.

After visiting Benny Lloyd and the boys in the Pittsburg office, and writing a flattering letter to Gage, giving glowing words of praise to the society, he left Wednesday noon for Chicago. Along came the conductor, who was one of the gruff, cross-grained kind. When Freshie gave the sign and password, "Sic Semper, etc.," this disagreeable conductor would none of it, but looking at Freshie with a sinister smile, said, "Sick, are you? You look like it, but I want your ticket." Freshie thought, "Well, he must have misunderstood me. Perhaps I'd better repeat." So, in agitated tones, he repeated, "Sic Semper, McGinnis, I've been boiled,—been boiled, understand."

"Been boiled? Should think you had, by the looks of your face!" The attention of the passengers had been attracted by this time, and Freshie's face was about the color of a lobster.

"Look here, young man," continued the conductor, "We don't want any fooling here. You're either an idiot or a fraud. Out with your money, ticket, or pass, or off you go so quick, 'twill make your head swim."

Freshie made frantic but hopeless efforts to be understood, and at last, just as the conductor was about to stop the train, with much reluctance paid his fare, amid the loud ha! ha! ha's! of his fellow passengers. He plunged his hands in his pockets, and, with a lowering brow, continued his journey, revolving the matter in his mind. At last the fact dawned upon him that he had been the victim of a huge sell. Upon reaching Chicago, he indited the following letter, which was read with shrieks of laughter by those in the joke.

JAMES GAGE, ESQ.,
President of the estimable Society,
"Knights of the Key:"

Your society is immense as far as Pittsburg, but after that it is not worth the paraffine that oozes out of a rheostat. Please accept my resignation.

Yours fraternally,
JOHN FRESHWELL.

And Freshie still lives on, a "sadder but a wiser man," for he had trusted, "not wisely but too well."

STALLACE.

Duxbury, Mass., May 16th, 1877.

The Decline of the Plug and Rise of the Electrician

Since the foundation of the first journal devoted to the advancement of the telegraphic profession, there has been no lack of good advice to the fraternity in a general way, the gist of which has been to divert their attention from the purely mechanical treadmill life of the practical operator to the deeper mysteries of the profession. By patient, persistent efforts this continued laudation of the higher branches has finally produced an impression upon the rising generation, and the results of this careful guidance are now being exhibited on every hand. The genus plug, that innocent promoter of profanity, is becoming scarcer year by year. We shall soon look back upon him as a member of that prolific yet despised race, now happily extinct.

The term plug originated in the days of "auld lang syne," when Doc Plummer was at "G," and signed "Plu," when "May" was spelled with a "y," and our forefathers worked in a shop instead of transacting business in an office.

We can scarcely expect a word, so obviously of a plebeian extraction, to survive in a country where the tavern has been supplanted by the hotel, and the drug store [illegible] of the coming [illegible]. The plug may die, but the electrician still lives. This progressive cycle is now broken, by which the student becomes a plug, the plug [illegible] into an operator, and the operator eventually developed into an electrician.

As my memory reverts to those elementary studies of the English language, where we were taught that the sound of words gave a clew to their meaning, I am tempted to analyze the word "electrician," but I cannot do it fairly. The word was first brought to me through the medium of those heavy bomb-proof productions of the English press, in which

$$\frac{x+y\div a=b-c\times d}{w^2}=a+b\times z$$

My mind's picture of an electrician being derived from these sources, I may possibly be excused from imagining him to be a man of rather more than the medium height, not less than sixty years of age, with a long flowing beard, his form slightly bent, and his eyesight much impaired by long and close application to books of logarithms, tangents, etc.

I am gradually, yet surely, losing my respect for the profession. Since the plugs have learned that a man may become an electrician without being an operator, and that unless one murders the Morse alphabet in actual combat with the reds and blacks, he may escape the disgrace of plugdom, the study of electricity is becoming epidemic. When the seeker for telegraphic glory now files his application for a chance to practice, signed

His
EZEKIEL x SPROUTS,
mark.

the wily manager remarks, "Young man, we have no vacancies in our department at present, but your autograph denotes a familiarity with the higher mathematics, which points to future success as an electrician." In the words of the lamented Webster, "there is always room up higher." "Here 'Six,' show this gentlemen to Mr. Ohm's department."

The Pumpkintown Bugle, the following week, would, doubtless, contain the following item:

> "Mr. Ezekiel Sprouts, who, for the past year, has so ably filled the position of assistant night-manager of the Western Union Telegraph Office, has accepted a position as assistant electrician at one of the most important telegraphic centers in this country. Mr. Sprouts well-known ability as a thorough student of the mysteries of the art is a sufficient guaranty that the duties of this responsible office will be intelligently performed."

A marked copy of the *Bngler* is received, and read by one who has known Mr. Sprouts up to the very date of his arrival at the metropolis as the night messenger of the Pumkintown office, where his electrical duties were confined to assisting in the cleaning of a local battery. As a batteryman he is, no doubt, a success. As an electrician he is, probably, superior to many who attach that title to their names.

Whether the personal item quoted above was an intended sarcasm, or the result of that familiarity with all branches of industry peculiar to the local editor, is not for me to say. Mr. Sprouts is not a person to venture beyond his depth. Had he been left to gravitate quietly from Pumpkintown to his present position in the main battery room, all would have been well; but when his friends from the country are gruffly told that there is no such man in the electrician's office, and, after a long and patient search he is found encrusted in a crystallized chemical compound of sulphates of zinc and copper, gently guiding a perambulator, laden with battery jars, over the slimy floor, they will, doubtless, remark that "the manufacture of electricity is dirty work, but it must pay mighty well."

STIX.

Some of the Trials and Tribulations of a News-Editor.

BY WM. ANDERSON.

The most industrious and conscientious of newspaper readers—aye, and even those connected with the getting up and publishing of journals remote from the great centres of population—have not the faintest idea of the existence of such a class of beings as news-editors. The gentlemen who indite the incisive leaders are well known; the ubiquitous reporters are familiar individuals; the critics (dramatic and musical) are pointed out as they sit, night after night, in their accustomed seats. But the indispensable news-editors are unseen, unknown, unheard-of by the intelligent communities in the midst of which they toil so diligently. To the compilers of all the latest intelligence from everywhere, the banquet board and brilliant theatres are strangers. In their ears the trump of fame never blows so much as a single note of approbation; their occasional errors are jeered at by every bright schoolboy. The news-editor labors at night, and sleeps by day; he knows something of the general appearance of the sun, for he remembers having seen it in happier years, before he became the bond-slave of gas light. For him there is no promotion in his profession, for a competent and experienced news-editor is a journalistic gem, too rare to be parted with.

To give something like a correct notion of what may be termed the half-mechanical labors of the news-editor, it is only necessary to state that all news passes through three pairs of hands before it reaches his. First, it is written at distant points—one paragraph in London, a second in Washington, a third in New Orleans, a fourth in San Francisco, and so on, through an endless chain of cities and towns. All the original transcripts pass into the hands of telegraphic operators more or less intelligent, more or less negligent. Here manipulators of the electric wires transmit the copy furnished to other operators, who, in turn, retranscribe it on what is technically known as manifold paper—sheets of tissue, of the old-fashioned letter size, treated with oil, and rendered transparent. Between these oleaginous pages squares of cotton cloth, saturated with lampblack are placed. The transcribing telegrapher, with a stylus of agate, writes on the top sheet, and the single impression strikes through distinctly to the underlying pages. An immense amount of copying is saved by the manifold process, and all the journals in one city get precisely the same matter. An error sent to one is an error to all. Mistakes—and ludicrous ones, too—are of frequent occurrence, and it is the duty of the news-editor to rectify them all; to make sense out of nonsense; to eliminate order from chaos. Some of the blunders are of so grotesque a character as to be readily remedied. For instance, in the early part of this year, the "manifold" revealed to the eyes of the smiling news rectifiers the information that "President Grant had transmitted to Congress a special *sausage* on the resumption of specie payments." It required no subtle penetration to divine that *message* was meant. A few years ago a tariff bill pending before Congress was flashed over the wires and manifolded to the offices of the morning papers. Judge of the astonishment of the solid men interested in customs duties when they read in every journal that the duty on "shoemakers' wax preserved in sugar" had been raised. None of them had ever heard of preserving shoemakers' wax in sugar. Yet there was the announcement staring them in the face in plain black and white, from the telegraphic columns of every morning newspaper in the city. Some of the more prominent importers telegraphed to Washington for an explanation of so ludicrously ambiguous a phrase in so grave a state paper as a tariff bill. Back came the answer, which read: "shoemakers' wax, and preserves in sugar." A somewhat similar, though less glaring, blunder, crept into the Washington dispatches of an afternoon paper in this city recently. It read, "The new Senator from Illinois, ex-Justice Davis, on account of his corpulency, has been given the Senatorial chair once occupied by Senator Dixon, and made specially for him by H. Lewis, of Alabama." The original and correct copy read, "the chair made specially for Senator Dixon H. Lewis, of Alabama." Some ten years since, there came over the wires an account of the proceedings of a National Temperance Convention, concluding with the announcement that the "meeting was very *parsimonious*." Laughingly, the news-editors substituted *harmonious* for the last word, and thus spared the feelings of the teetotalers.

LIGHTNING FLASHES.—We have received a book entitled, "Lightning Flashes," published by W. J. Johnston, publisher and editor of THE OPERATOR, No. 11 Frankfort St., N. Y., a journal devoted to the science of telegraphy. Mr. Johnston is one of the youngest publishers in this country, and was the first to give telegraphy a literature of its own. This book is full of sketches by gentlemen who have been contributing to the columns of his paper, and who have become famous as writers in this especial literature. It also contains sketches from several well-known outside authors, and is beautifully illustrated, with an excellent portrait of Morse, the father of telegraph, and the first message he sent over the wires, with a condensed history of telegraphy. We predict for the book a very large sale.—*Long Island Courier.*

The New York Wire Club.

The door opened suddenly and Sergeant-at-Arms Stephenson announced, in a loud voice, that three gentlemen from Boston were in waiting. The chair (Denis Brown) appointed a committee consisting of Denny Harmon, Jimmie Pie, of 53 East, and Charlie Howlett, to escort the visitors to the head of the table. The Boston gentlemen were Spike Sullivan, Tom Davin, and George Wheelock. The chairman introduced them to the assembled company in his happiest vein. Mr. Wheelock then took the floor. He expressed himself as greatly pleased at seeing this mobilized body of telegraphers. The object of his visit to the club-room was to announce that himself and associates intended giving an amateur theatrical performance at Spuyten Duyvil June 15th. The play selected was "Sammy Baxter," the scenes and incidents of which are founded on the life and vicissitudes of a telegraph operator. Mr. Wheelock was proud to say that many noted men from the main office had kindly volunteered to appear on the occasion. He then gave a synopsis of the play. In the opening overture a quartette, consisting of Messrs. Lambdin, Risdon, Hickey, and Jerry Borst, will sing, "Must we then Meet as Strangers." Mr. O'Reilly will also render an Irish melody. The second act introduces Bif Cooke and Denis Brown's baby. The third act will represent telegraphers on a pay night, and the scene will be Cahill's, in Park Row, with Mr. H. S. Larcombe (who comes on specially from Washington for the occasion) as the central figure. The whole to conclude with the reading of Fred Baldwin's paper on the Boston fire.

Tom Davin was the next speaker. He was sorry to mar the pleasures of the evening, but he felt constrained to protest against the language recently used toward him over the wire. A New York operator, signing C. B., had called him a Greek. [Uproar and confusion.] Spike Sullivan then sang, "Three Merry Men are We." When Mr. Coombs arose he was evidently laboring under great excitement. He said he signed C. B., and he did not intend to let any man tell him to take his other foot without returning the compliment. He would tell those Boston men that, although he was a young operator, he could go through a pile of messages like a train of cars through a country village. [Cheers.]

Jerry Borst was next recognized by the chair. His appearance on the floor was greeted with uproarious cheering. He said that the other day he was put on the Hartford and Providence quad, with Mr. Hoyt and Tommy Allen. These men worked with me in '58, and their way of doing business was so much like the way it was done in my time, that I passed over a note to Allen asking him if he could get out a few minutes at 2:30, when I was off duty. His reply was characteristic of an old man. "Jerry," said he, "it would not do to get excused to go down stairs for an apple and come back smelling of cloves and lemon-peel." [Roars of laughter.] You never hear old-timers talking about their smartness.

Gus Coleman entirely agreed with Mr. Borst. If some of the claims to fast work were investigated, they would be found to rest on about the same basis as the Irishman's title to the United States army blanket. "Yis, that's moine; U. for Patrick, and S. for McCarthy." [Laughter, cheers, and applause.] Mr. R. G. Stephenson said that his own telegraphic reputation reminded him of the man who lost some money on the street and kept looking for it until quite a crowd had collected. Finally a skeptical individual inquired what amount he had lost. The reply was, "Only a penny; and," added the loser, "I don't care so much about the coin, but I am curious to know where the deuced thing went." [Laughter.]

Dad Benett gave the following toast: "E. F. Welsh—a right jolly good fellow, with the perception of a child." Drank with enthusiasm.

On motion of Johnny Moffatt, the meeting adjourned.

"Only A Woman."

TO THE EDITOR OF THE OPERATOR:

Pray tell us why the account of the lady operator described in the last issue of your paper as being so extremely patient and ladylike under circumstances peculiarly trying to the patience of one occupying a position similar to hers, should be headed as "Only a Woman?" Are we to understand that the writer does not admit that the fact has long been established that a woman is more adapted to holding positions where patience and self-control need to be exercised than is a man, or does he mean to insinuate that because he has only found one lady operator who comes up to his standard of female virtues, the rest of us as a class need instruction and cultivation in this respect? I would not have you think for a moment that I desire one sentence abstracted from the article that reflects so much credit on the lady spoken of. On the contrary, knowing so many of them personally, who from necessity hold these positions, and reflect credit on themselves by performing their duties as faithfully as they do, I feel that the pen of no member of the profession is able to do them justice. I only wish to give relief to the indignant feelings that arise when I look at the article headed "Only a Woman." Let us suppose for a moment, (and I acknowledge the supposition to be as improbable as it is ridiculous), that one of the lords of creation, commonly called men, had deported himself as did this true-hearted girl, would the article describing him as possessing so many virtues have been headed as "Only a Man?" Nay, methinks 'twould rather have been "a noble hearted, courageous, and christian gentleman," then why speak of this lady as being "Only a Woman?" As to the lessons we lady operators are requested to learn from the article, allow me to inform the writer that we are learning by experience, and from daily contact with many noble hearted girls in our telegraph companies, such lessons of self control and patience as can only be learned through these influences. Also permit me to raise my voice in contradiction to the insinuation made by him that we are apt to give vent to the wish "That we were men." I do not deny that there are moments when our indignant feelings arise at the impositions heaped upon us, we may fervently hope for that honor (?) in order to avenge our wrongs, but which because we are women we must patiently submit to; but at other times, those of sanity and reflection, when the fact is undeniable of our possessing the traits of character that enable us to so successfully cope with the trials and difficulties peculiar to the responsible positions held by us, we would fain raise our voices to Heaven in thanksgiving, that we were placed on this earth to occupy no higher (?) position than that of "only women." Truly yours, PATSEY.

New York City, May, 1877.

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Congratulations from John Oakum.

NEW YORK, May 24th, 1877.

DEAR MR. JOHNSTON:

Allow me to congratulate you sincerely on the elegant appearance of "Lightning Flashes." I cannot but note, with a feeling of honest pride, the appearance of an additional contribution to telegraphic book literature, while the fact that the demand among operators for reading matter of their own kind is by no means satiated in my own little book, gives me a deep thrill of pleasure. It seems to me that the telegraphic profession, which I have ever maintained possesses more bright, intelligent, capable men and women than any profession of which I have knowledge, is more than sustaining its reputation; not only by the liberal manner in which it purchases the books written for its entertainment, but by producing, here and there, a man or women who furnishes articles, sketches, or verses, which, for accuracy of diction, grace of style, delicacy of thought, and general excellence, are certainly above any standard yet reached by amateur *litterateurs*.

Indeed, a careful perusal of a considerable portion of "Lightning Flashes" leaves me strongly impressed that it contains very many specimens of writing which would not be out of place in the best publications. And of none of the book's contents is this more true than of the cheery little story, "A Centennial Telegraphic Romance." Wit, humor, and philosophy, are most harmoniously blended in that production, and under all there is a current of healthful sentiment, which renders the story as sweet and breezy as a day in June.

Mr. Christie's work is always admirable; but, in "The Volcanograph," he seems to have gone even beyond his habitual degree of excellence. The conceit is ingenious; and it is worked out in a manner so artistic and natural, that I felt, upon reading of the poetical vengeance which was wreaked on Junius Brutus Plug, of Butler County, Penna., more as if "Werner" had been writing of some real invention already doing its laudable work, than of a figment of his brain.

Mr. Pope's "Foot Race with a Telegram" is an exquisite piece of writing. While the contributions by Messrs. Reid, Maclachlan, Churchill, Chase, Shaw, Bliss, Van Hoevenbergh, Clippinger, and others, are as noticeable for excellence in their respective lines, as they could have been had they been written by professionals—men of ten times their reputation in literature. Indeed, I am very much pleased with the book, in whole and in part, and I am proud to be a telegrapher—even if on the retired list—when the people with whom I have associated and among whom I must always find the most of my friends and kindred spirits, produce such books as the one before me.

In reference to the pictures, they also seem to me to be far above the amateur average. Mr. Calahan, whose pencil has made him famous wherever the click of sounder and stick of key are known, has acquitted himself honorably and to the everlasting credit of a profession which will not, probably, possess him always, and which should feel all the more proud of him while he remains. Mr. Christie and Mr. Empey, though contributing fewer pictures, have placed the fraternity under obligations for several audible smiles, and the sale of "Lightning Flashes" will demonstrate that this obligation, as well as the numerous others which we are under to our clever friends, is duly recognized.

Your book is sure to succeed, and that the sale will go on year after year I firmly believe. Operators are beginning to awaken, and, from the cities and by-places, you will receive not only orders, but, as time wears on, literary articles, sketches, and verses for publication in your paper, in increasing abundance. There are more cultivated and clever people in the telegraphic ranks than you or I have dreamed of, my dear fellow, and they will come forth from their hiding places bye and bye, and invest the prosaic business in which they are engaged with a more lasting glory than the inventors will ever give it. The day of a full-fledged telegraphic literature is coming—slowly, perhaps, like all good things, but surely, and all the faster for the publication of the charming book I now reluctantly dismiss. Very truly yours,

W. P. PHILLIPS

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Echoes from 197.

8 to 6 is a "roast."

Telegraphers' live on "tick."

J. J. McDermott of Philadelphia is in town.

Granzon and Cox work the new quad to Richmond.

George Sawyer of Washington has joined the night force.

Miss H. Dieckeman, late of the Grand Street office, is now in charge of the Western Union office in the Post Office.

Malcolm McCullough has resigned and accepted a situation with the W. U. at Chicago. Mc. is a good boy and a fine telegrapher.

Mr. Moodie Downer, of the Chicago quad, was married on Thursday evening of last week, to Miss Nellie Buckingham of Bridgeport, Conn.

The rumor that the Western Union threatens to discharge and blacklist all operators who by the second of June are found without a copy of "Lightning Flashes" is unfounded.

G. B. Merrill and Bill Bennett having been transferred from the night to the day force, Dennis Brown and Patsey Tierney have changed tricks, the latter now working the Boston quad, days.

Joseph F. Murray, a telegraph operator of 14 Hunterton Street, Newark, N. J., was sunstruck at Thirty-fifth Street and Broadway, in this city, on Sunday, May 20th, and died the following day.

Mr. Fred Rector who has been ill for a number of months, has been advised by his physicians to stop work and recuperate his wasted energies by a long season of quiet and repose at his home in the country.

Mr. Robert Henry has resigned his position as chief operator, Private Line Department, G. and P. Telegraph Company, to engage in other business. Mr. C. H. Walton, inspector same company, has been promoted to fill the vacancy.

The death of Samuel Hoffman, the celebrated deaf telegrapher, for many years chief operator at Mobile, has just been received. At the close of the war, Hoffman came North, and worked for some time in Washington and Richmond, but finally returned to the Gulf States, and settled in Mobile. His ability as a telegrapher was exceptional, not only as regards correctness, but copy and speed. His usual manner of receiving consisted simply in lightly placing his fingers on the lever of the sounder, and the writer has stood by in open mouthed astonishment at hearing Johnny Clark (in Chattanooga) "hoop 'em up" at a terrific gait, which "dummy" would copy with apparent ease, scarcely ever breaking or asking a question. He conversed quite intelligently by watching the motions of a person's mouth, but over his voice he had not the slightest control; the boys sometimes would be convulsed with laughter at hearing him commence a sentence, when angry, in an almost inaudible tone, but ending in a perfect howl of frenzy.

Mr. Thomas Bishop, the whilom fast sender of "Way East" press, but at present connected with the New York Associated Press at Baltimore, Md., visited his old quarters last week, in company with Walter P. Phillips. "Tom" is looking splendidly, and apparently enjoying life after the fashion of all those who are blest with clear consciences, and write good Morse.

Mr. R. H. Morris, one of the oldest, most popular, and reliable men at 197, has received the appointment of mechanical engineer. Though not strictly a promotion, it still places him in the direct line of advancement while emancipating him from the drudgery of working a key.

Mr. John Ashhurst, for many years a well known operator at 197, has been appointed superintendent of the Jersey City Fire Alarm Telegraph. "Johnny" is a good boy, capable of bearing his honors modestly, and in every particular well fitted for his new position. He carries with him the good wishes of all.

On May 16th, Mr. Stone of the A. and P. office, 145 Broadway, sent to Pittsburg 2,303 words of press in 55 minutes, being at the rate of almost 42 words a minute. Mr. Foreman was the operator at Pittsburg. This is splendid time for a 600 mile circuit, and on a wire on which there are no repeaters.

Mr. Samuel H. Bates, assistant superintendent automatic Fire Signal Co., of this city, was married at Newark, May 7th, to Miss Mary F. Johnson. Mr. Bates and bride immediately left for Boston, where the former takes the position of superintendent of the Automatic Company.

Mr. M. C. Bagley returned last week from a flying trip to Baltimore and Richmond, in which offices he has been doing some electrical work for the company. It is understood he will have charge, this summer, of the Cozzens Hotel, West Point, office. Without exception the most delightful position within the gift of Superintendent Brown.

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Governors Congratulating Each Other on the Completion of A. & P. Lines.

ALBANY, N. Y., May 23.—Governor Robinson this afternoon received the following telegram:

NASHVILLE, Tenn., May 23.

To His Excellency Governor Robinson, Albany, N. Y.

The completion of the line of the Atlantic and Pacific Telegraph Company to this point is another link that binds the South to the great Empire State of the Union, and secures cheap telegraphy to the public for which we thank the capitalists of your State. (Signed JOHN D. PORTER,

Governor of Tennessee.

The response was as follows:

ALBANY, N. Y., May 23, 1877.

Hon. John D. Porter, Governor of Tennessee, Nashville, Tenn:

The State of New York rejoices at any new bond of union between herself and her sisters of the South and West. No ties are more pleasant than those which join her to the gallant State of Tennessee. Accept her congratulations upon the completion of your new line of telegraphic communication, and her wishes that it may bring your people added prosperity and convenience. LUCIUS ROBINSON,

Governor of New York.

◆

LAST evening, when the news of the European war was coming over the wires in the press report, and the Burlington operator was getting along just swimmingly, a four-in hand name of a Turkish province, with more syllables than a centipede has legs, came tearing along the wires like an earthquake with the delirium tremens, ripping the insulators off the posts, and smashed the instrument, pulled off the top of the table, blew out the gas, upset the stove, kicked over the spittoon, chased the amazed and indignant operator under the table, reached after him, hauled him out by the legs, and thumped him on the head with a coil of copper wire. The operator, when he got things straightened out again, telegraphed to the general office that there had been an invasion of Bashi Bazouks all along the line. —*Burlington Hawkeye.*

THE OPERATOR A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY

W. J. JOHNSTON, - - - Publisher.

June 1st, 1877.

DURING MR. JOHNSTON'S ABSENCE IN EUROPE correspondents will please address all matter for the literary department of the paper, personals, items of news, etc., to JOSEPH CHRISTIE, P. O. Box 2675, Philadelphia, Pa.

Subscriptions, orders for books, etc., or in connection with THE OPERATOR Purchasing Agency, and all business communications generally, as well as New York City items, to W. J. Johnston, Publisher, P. O. Box 3332, New York, as usual, to whom Post Office orders, drafts, etc., are to be made payable.

Correspondents will do much to facilitate the business of the paper by bearing the above instructions in mind. Readers are cordially invited to forward items of news; also, when anything likely to interest telegraphers appears in their local paper, they will confer a favor by marking the article, and mailing the paper to J. Christie, P. O. Box 2675, Phila., Pa.

"30."

Au revoir.

Back again in September.

O. K. J.; relief; G. a. C.

Thanks for good wishes for a *bon voyage.*

What do you think of "Lightning Flashes"—nice?

Look out for the announcement of the arrival of the "City of Berlin."

Now, Old Probabilities, give us ten days of fine weather on the Atlantic.

See notice at top of this column in reference to correspondence during the Summer.

Don't forget to keep Werner supplied with news during the summer. Courtesies shown Mr. Christie will be appreciated as if rendered direct.

"EYES of Blue and Eyes of Brown," a story by the author of "Playing with Fire," reached us too late for this issue. It will appear in our next.

ON account of unusual pressure of other important matter, we are compelled to postpone the continuation of "The Thorsdale Telegraphs" until next issue.

AND now it is said that a wood engraver of this city, named Holcomb, claims to have taken out a patent fifteen years ago for the talking telephone which Professor Bell exhibited in this city last week as his own invention. Mr. Holcomb is poor, and says that he does not hanker after the honors, but intends to attach the receipts at any concerts which Professor Bell may give. The exhibition in this city was not pecuniarily a success, which was all that prevented Mr. Holcomb from interfering. The above has not got into the papers, but we have it on good authority.

OPERATORS' SALARIES DURING SICKNESS.

A correspondent draws our attention to a subject which, we think, deserves serious attention. Telegraph Companies are in the habit of stopping an employé's pay the moment that ill-health so completely prostrates him that he is unable to attend to his duties. The sickness, in nine cases out of ten, is contracted in the illy-ventilated and unhealthy offices which the company prefers to retain rather than add a few hundred dollars a year to its expenses by leasing a more suitable place of business. The cruelty and injustice of this custom has recently been very forcibly presented in the case of two operators in a neighboring city. One, a young man twenty-one years of age, has been with the Western Union for a number of years—grew up, as it were, with the Company. He was not a first-class man, but faithful and honest, and did the best he knew how. He was kept in a branch office, a place railed off in a hallway, into which a door opened directly from the street—opening and closing continually—and subject to dust, dirt, and drafts, which had sickened several men before. A cold was the result, and no cure possible in such a place. Hemorrhage speedily set in, and he was soon reduced to a mere skeleton. Being the principal support of his father, mother, and sisters, he dragged himself daily down to work, for his miserable pay, thirty-five dollars a month,—think of it! was about all that the family had to live on. To procure more money, the poor fellow applied for "extra" while in this condition, and was given two or three hours a night in another branch office, at the rate of his salary, 10 or 15 cents an hour. He fought along through this for a short time, until everybody commenced to to talk openly of the shame of keeping him at the branch office, when, instead of being sent home with his pay, which he richly deserved, or even a part of it, he was transferred to the main office for a change, where he had to climb to the third story. To see him reach the top step, gasping and trembling, would touch the heart of a stone; but he got no sympathy from those who could, with a word, relieve him. His comrades in the office couldn't stand it, so they generously clubbed together, and, out of their scant salaries, raised forty or fifty dollars, which was delicately presented to him, with the understanding that he should stay home, and take the rest he needed. Once in bed, he remained there until death relieved him, and not one cent of pay did he receive from the day he left, the operators nobly contributing each pay-day to keep him in the necessaries of life.

The other is a first-class man, and has been in the same office for six or seven years, faithful, attentive, sober, and reliable, but he was no exception to this miserable custom. Every morning that he visited his doctor the time was carefully noted, and taken from his pay. Every day lost was charged to his account. His family had to live, so he, like others, was at his desk when he should have been in bed, and, at last, dropped in a faint on the office floor from sheer weakness and exhaustion. Even at this extremity, how was he treated? laid on chairs in a storeroom, and asked, positively asked, if they should send for a carriage. The poor fellow afterward said, "I thought I would like to get home, but I knew they would charge the carriage to me, so I told them, no, as I had already lost more than I could afford." Work, of course, was impossible for him after that, and, as living in the city without any income was equally so, he had to store his furniture, and go home to his father in the country.

Surely, this is not a proper way to treat faithful servants and worthy men whom illness unfits for duty. In England, when an operator is compelled to quit work on account of sickness, he receives, we believe, one-half his regular salary, and, when he has served the Department until old age renders him unfit for further duty, he retires on a pension. In this country, the minute sickness overtakes him, although under increased expenses, his salary at once stops, and, if he has no father or friends, he must either seek the alms-house, or subsist on chance charity. When old age comes the Company does not remember that he wore out his life in its service, but heartlessly drops his name from its pay roll, and he is compelled to seek a livelihood elsewhere.

Something should be done to remedy this state of things. The Companies can amply afford to pay at least one-half of a man's salary during sickness. The matter would, probably, require to be brought before the Board of Directors. If presented in the proper light, it surely would not fail to meet their approval. But if telegraph companies, heartless and grasping, fail to take the matter in hand, telegraphers themselves should not pass it over. A Relief Association might be organized, whose object would be the paying of a stated sum per week to each member during sickness. It might be operated in connection with that excellent institution, the Telegraphers' Mutual Benefit Association, or separate, and, in either case, we think would have the countenance and support of telegraphers generally, as well as, perhaps, the Western Union Company. We merely make the suggestion. Will some one take the matter heartily in hand, and see what can be done?

Professor Bell's Telephone.

The exhibition of Prof. Bell's telephone in this city, on the evening of May 19th, was attended by quite a large number of telegraphers of the city and vicinity.

The Professor opened with a full and intelligent description of the origin and development of his invention, illustrated by copious illuminated diagrams thrown on a screen at the rear of the stage. The instrument now used is contained in a box about six inches square by eight inches in length. Inside this box is an iron diaphragm, to which is secured the cores of an electro-magnet, the poles of which are placed opposite to those of a permanent magnet placed in a horizontal position on the bottom of the box. The wire from the coils of the electro-magnet leads to corresponding helics in the telephone to which it is connected, the wires beyond the instruments being run to the ground. The sound from the voice, acting upon the diaphragm, causes it to vibrate rapidly together with the electro-magnet attached to it. The influence of the permanent magnet causes corresponding pulsations of magneto-electricity to be generated in the helics of the electro-magnet, and thence along the line through the magnet of the companion instrument, which is thus caused to vibrate in unison with the transmitting telephone. No battery beeng used, nor any breaking of the circuit required, it is obvious that no change in adjustment is necessary.

The transmission of musical tones from a cabinet organ in Yonkers was quite successful. This, however, was accomplished by the use of a battery and a special attachment to the reeds of the organ. Three telephones were used—one on the stage, and the others suspended in opposite parts of the room, the circuit being switched from one to the other to enable the audience to hear distinctly in different parts of the room.

The transmission of speech was not so successful so far as the audience was concerned, but those who went upon the stage satisfied themselves that a little experience only was necessary to enable people to converse with comparative ease. The distance (twenty-six miles) is probably greater than this instrument is available for. Its future seems to be more especially in the field of private telegraph lines, the liability to error in the transmission of unusual names and words being so great as to debar it from use for general public business.

A Chief Operator Encouraging Plugism.

The Western Union chief operator at Kansas City takes offense at an article in our issue of May 15th, and sends us the following very warlike communication:

Kansas City, May 18, 1877.

To W. J. Johnston, Esq., Publisher:

Dear Sir—The article headed "A W. U. Chf. Opr. encouraging Plugism," signed "Subscriber," in your issue of May 15th, contains twelve wilful (?) and malicious lies.

Are you responsible for the article.

Respectfully,
M. D. Crain,
Chief Opr. W. U. Tel. office, Kan. City, Mo.

Mr. Crain's statement that the article contains twelve "willful and malicious lies" is, to say the least, vague. If his bombastic "Are you responsible for the article?" is intended to frighten us, it may interest him to know that we are not easily scared. The article published last issue was not the only one we had received on the subject, and from all we can learn did not misrepresent the facts. Since its appearance we have received several other communications on the same subject. In one of them the writer says: "The article is every word true. He teaches telegraphy in this college, and encourages it whenever he can. He is a man of no principle whatever, and should be driven out of the business." Another says: "The article is true. Think it would be best to pay no attention to his letter. He deserves none; for by connecting himself with that plug factory he sacrificed principle for lucre, and surprised us all." Others write in a similar strain. It is not, however, the practice of The Operator to condemn without giving the accused an opportunity of being heard in his own defense. If Mr. Crain can, therefore, prove that the article really contained "twelve willful and malicious lies," and that he was slandered, we shall submit the matter to our readers, and if it is shown that injustice was done, shall be very happy to set him right before the fraternity. In the meantime, no amount of bluster will change the aspect of the case. He either teaches telegraphy and drags down the profession by flooding the market with incompetent talent, or he does not.

Good Bye.

As I expect to sail for Europe on Saturday, June 2d, I cannot allow this paper to go to press without saying a word of farewell to the readers of The Operator I have placed the editorial management of the paper during my absence in the hands of a gentleman who seems to me to be the most suitable person I can find for the position. He is a man in whom I have implicit confidence, both as to ability, good judgment, and solicitude for the welfare of the telegraphic fraternity. I hope the readers will render him all the assistance in their power, and that everything may work smoothly and harmoniously during the summer. During my absence I hope to be able to send from time to time letters describing what I shall see in Europe that may be likely to interest American telegraphers. I do not expect to return until September, unless something shall happen in the meantime to necessitate it. The "City of Berlin" is one of the largest and finest passenger steamers afloat, and the weather is likely to be so fine that a pleasant and safe voyage may be anticipated. I hope that when I return next fall I shall feel so much reinvigorated by the trip that I may be able to make The Operator an even better and more readable paper than it has hitherto been. So many, by letter and otherwise, have wished me a *bon voyage*, that I may not have been able to answer them all. I, however, now return them my best thanks, and hope that they and all the readers of The Operator may enjoy good health and prosperity, and be free from sliding scales and kindred calamities until the return in September of Very truly yours, W. J. J.

Lightning Flashes and Electric Dashes.

It is truly gratifying to us that Lightning Flashes has proved so acceptable to the telegraphic fraternity. We took considerable pains to get up a book of which the profession might be proud, but the numerous congratulations and words of praise received since the book was published, have amply repaid the trouble. Besides the newspaper notices, etc., in other parts of this paper, we will quote here just a few of the opinions of persons at different points:

Albany: The book is *immense*.

New York: The most comical book I ever read.

Elmira: All are unbounded in their praises of it.

Philadelphia: Very pretty indeed, and will be an immense success.

Northbridge: The article, "Prof. Morse and the Telegraph," is alone worth the price of the volume."

Portland: A first class book in every respect. Every operator ought to have a copy, or else they should be in some other business.

Tallahassee: Inexpressibly pleased with it. The eternal gratitude of all telegraphers and the rest of mankind is due the authors and publisher of so interesting and amusing a work.

Good Wishes from "Brethren of the Mystic Tie."

At the regular communication of United States Lodge, 207, in Masonic Temple, in this city, May 21st, Worshipful Master W. W. Marks, on behalf of the lodge, tendered to Bro. W. J. Johnston, who sails for Europe June 2d, very cordial and fraternal well wishes for a safe, pleasant voyage, and speedy return. *New York Dispatch.*

Themes for the Thougtfuhl.

Friendship is infinitely better than kindness.

A man of integrity will never listen to any reason against conscience.

Take counsel of thine own heart, for there is not a more faithful monitor.

To be a man's own fool is bad enough; but the vain man is everybody's.

He surely is most in want of another's patience who has none of his own,

Love is a flame which burns in heaven, and whose soft reflections radiate on us.

Some run headlong into danger, because they have not courage to wait for it.

Pride is not always disgraceful; though what we pride ourselves on is very frequently.

A miser grows rich by seeming poor; an extravagant man grows poor by seeming rich.

They are generally better satisfied whom fortune has never favored than those whom she has forsaken.

As a walled town is more worthy than a village, so is the forehead of a married man more honorable than the bare brow of a bachelor.

Of all the actions of a man's life his marriage does least concern other people, yet of all actions of our life it is most meddled with by other people.

As long as love prevails in a house space of the breadth of a sword is satisfactory. As soon as it disappears sixty hand-breadths are not sufficient.

Like dogs in a wheel, birds in a cage, or squirrels in a chain, ambitious men still climb and climb, with great labor and incessant anxiety, but never reach the top.

Be a pattern to others, and then all will go well; for as a whole city is infected by the licentious passions and vices of great men, so it is likewise reformed by their moderation.

Love teaches cunning even to innocence, and when he gets possession his first work is to dig deep within a heart and there lie hid, and, like a miser in the dark, to feast alone.

There is not, perhaps, a more whimsical figure in nature than a man of real modesty who assumes an air of impudence; who, while his heart beats with anxiety studies ease and affects good humor.

What is this life but the circulation of little mean actions? We lie down and rise again, dress and redress, feed and grow hungry, work or play, and are weary, and then we lie down again and the circle returns.

With virtue, capacity and good conduct one can still be unsupportable. The manners, which are neglected as small things, are often those which decide men for or against you. A slight attention to them would have prevented their ill judgments.

Manners are the shadows of virtues; the momentary display of those qualities which our fellow creatures love and respect. If we strive to become, then, what we strive to appear, manners would often be rendered useful guides to the performance of our duties.

Evil is easily discovered, there is an infinite variety. Good is almost unique. But some kinds of evil are almost as difficult to discover as that which we call good; and often particular evil of this class passes for good. It needs even a certain greatness of soul to attain this, as that which is good.

That politeness which we put on, in order to keep the presumptuous at a proper distance, will generally succeed. But it is sometimes that these obtrusive characters are on such excellent terms with themselves that they put down their very politeness to the score of their own great merits and high pretensions, meeting the coldness of our reserve with a ridiculous condescension of familiarity, in order to set us at ease with ourselves

A minute analysis of life at once destroys the splendor which dazzles the imagination. Whatsoever grandeur can display or luxury enjoy is procured by offices from which the mind shrinks from the contemplation. All the delicacies of the table may be traced back to the shambles and the dunghill; all the magnificence of building was hewn from the quarry, and all pomp ornament dug from among the damps and darkness of the mine.

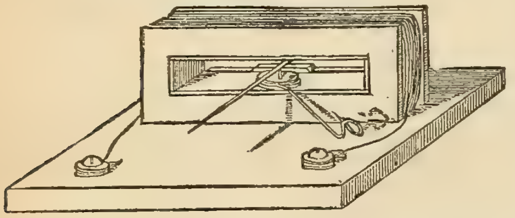
Scientific Department.

[This department is under the charge of Mr. H. Van Hoevenbergh, 115 Broadway, to whom all communications relating thereto should be addressed. Mr. Van Hoevenbergh will cheerfully answer here any queries pertaining to electricity, magnetism, or kindred subjects.]

ELECTRICAL MEASUREMENT.

II.

HOW TO MAKE A GALVANOMETER.



It would not, of course, be possible to make a galvanometer equal to a Siemens, or Varley, without the use of delicate and expensive machinery. Such an attempt would be foolish. Fortunately, however, an instrument, suitable for ordinary work, can be easily constructed with such tools as almost every operator can handle. A sharp pen-knife, a small three-cornered file, a screw driver, and a pair of pliers, is all that is necessary, in the way of tools, to make the instrument shown above. The materials required are:

A piece of black walnut, five and a half inches square, one-half inch thick.

Some pieces of hard wood, one-eighth of an inch thick. A cigar box will do, if nothing better is obtainable.

A couple of old relay coils.

A piece of watch spring, an eighth or three-sixteenths of an inch wide, and about three inches long.

A piece of office wire, about number fourteen, six inches long.

Two round-head screws.

Four washers.

A small piece of sealing wax.

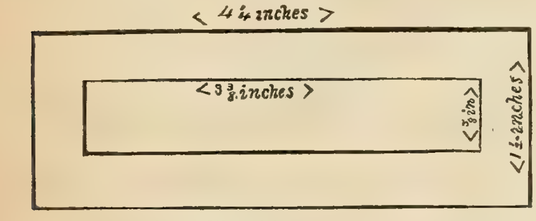
Some glue. A common needle, and

A little patience.

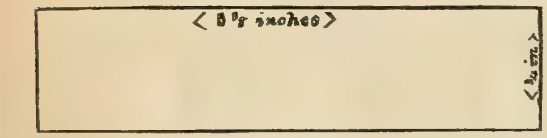
The nearest carpenter will supply the wood. The relay spools can usually be obtained without much difficulty. If no other way of getting them presents itself, write to the nearest telegraph supply establishment, and have them sent by express. They always have plenty of them on hand, and will sell them very cheaply, The watch spring can be bought or begged of the local watchmaker. They are generally glad of the chance to give it away.

The screws and washers can usually be found around the office, while the acquisition of the needle, the glue, and the sealing wax, presents no special difficulties.

Cut, from the thin wood, two pieces of the size and dimensions shown here:



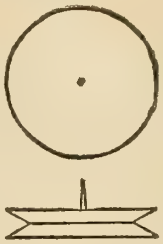
Also two pieces like this:



Fit these two into the oblong holes in the two first pieces, top and bottom, and cut two smaller pieces to be fitted into the ends of the opening. Consult the drawing at the head of this article for the precise manner of doing this. Glue the pieces tightly in place.

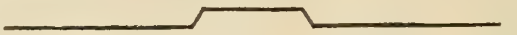
When finished, it should be an oblong spool or bobbin, with an elongated hole through it. Wind this bobbin, full of wire, from the relay spools, taking care not to let the turns cross each other, and to secure the end commenced with. If such a misfortune should occur as the breaking off short of this end, it will be necessary to unwind the wire, and take a fresh start. Should the wire get uneven and irregular, cut a piece of writing paper to the exact width of the groove, fit it in, and wind over it. This dodge is always resorted to in winding electro-magnets, in order to have the last layer present a smooth and even appearance.

Next, cut out a round piece of wood, thus:



and file a grove in the edge of it, something like a pulley. Thrust the needle through the center of this disk, letting it project about a quarter of an inch, and break it off. Then glue this disk in the opening in the bobbin, as shown in the first drawing. When this is done, glue the bobbin to the black-walnut base, about an inch and a half from the farther edge. Fasten it on *with* the grain of the walnut, not across it.

Heat the middle of the watch spring red hot, in a gas jet, or the flame of a lamp, and allow it to cool. Then bend to this shape:



If the first piece should break, get another, and try it again. Make a dent in the middle of the spring with something that has a sharp point, so that it will not slip off the point of the needle. Shave a piece of wood, about two inches long, very thin. Cut to one-eighth of an inch in width at one end, and taper it to a sharp point at the other. Cement it by means of the sealing wax to the watch spring, so as to project at a right angle. The wide end should extend far enough beyond the spring to balance the long end, or pointer. When this is done, magnetize the spring (it may now be called a needle) by drawing it across *one* of the poles of a well-magnetized sounder magnet, always in the same direction. When the needle is properly magnetized, it should lift an ordinary carpet tack. If screw-posts are obtainable, so much the better. If not, the screws and washers, arranged as in the first drawing, make a very good substitute. Should there be no awl handy to make the holes for the screws (and there usually isn't, use the tang or handle end of the file.

The bent wire shown in the drawing is used instead of a scale. This scale would be of no use unless very accurately divided—an operation impossible to perform by hand. It is used, in many systems of measurement, merely to mark and note the position of the pointer. This is done, in this instrument, by the bent wire.

File one end of the piece of office wire sharp, and bend to the shape shown. Bend the other end around the groove in the needle disk. Let the sharp point extend to within a sixteenth of an inch of the end of the pointer. It should move in the groove with friction enough to hold it wherever placed. Place the galvanometer so that the bobbin stands north and south, with the pointer pointing east, and apply the wires from a cup of battery to the screws. The needle should now be deflected, as explained in the first article of this series.

Our galvanometer is now finished. It may be neatly smoothed and varnished, if desired, but will work just as well without. It will be found very useful for ascertaining the comparative strength and the direction of electrical currents. For actual measurement, a rheostat, or set of adjustable resistance is essential. This is not half so formidable as it looks. Our next article will describe a simple arrangement for this purpose.

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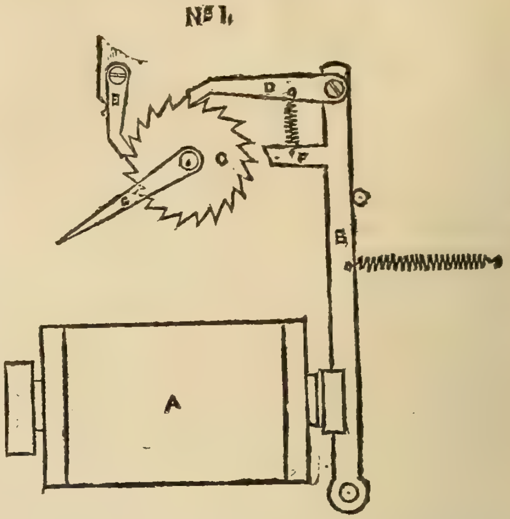
In a recent lecture on heat, delivered at the Royal Institution, Professor Tyndall described an invention of Mr. Siemens to detect the oxidation of telegraph cables. It indicates the heat that the oxidation occasions, and thus shows to what extent the rust is forming. It is chiefly of service with cables coiled in tanks.

There has been lately discovered in Nicaragua a plant which has electro-magnetic properties. If you tear off a branch you experience an effect as though struck by a battery. The discoverer could not, by careful analysis, detect any magnetic metallic substance in the surrounding soil. The intensity of the shock varies according to the hour. At night it is scarcely perceptible. At 2 P. M. it is strongest. Birds and insects never seem to light on the *phylotacca electrica*.

ELECTRO-MECHANICAL MOVEMENTS.

No. 1.



When a current is sent through the magnet A, its armature, with the lever B is attracted, and the ratchet wheel C is caused to advance one tooth by the pushing movement of the pawl D. The retaining pawl, E, prevents the wheel from turning backward, and the point, F, stops it after its advance. The wheel, without this point, would move forward several teeth. Should a number of impulses be given, equal to the number of teeth on the ratchet-wheel, the latter would make a complete revolution, and the pointer G would return to its original position.

This movement has been quite extensively used in stock reporting telegraphs, dial instruments, and other arrangements of like nature.

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New Books.

A Practical Treatise on Lightning Protection. H. W. Spang. Philadelphia: Claxton, Remsen & Haffelfinger.

As its name indicates, this book is a thoroughly practical treatise upon this important subject. At least half of the rods put up invite disaster instead of repelling it. But the time has passed when almost anything in the shape of a conductor, if only fancy and ornamental enough, would be considered sufficient protection, and owners of property, exposed to danger from this cause, are beginning to make inquiries as to what can be done to insure safety. To such, this book will be of great value. A careful reading shows that the subject has been exhaustively considered, and that the methods of protection suggested are based, not upon fancy theories, but on solid experience and an intimate knowledge of what is required. The text is amply illustrated, is interesting and readable, and supplies a want which has been generally felt. It may be regarded as a standard work, and should have a place in every scientific library.

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San Francisco, Cal., Notes.

The following changes have recently taken place in the force of our main office here. Charles H. Boynton left about April 20th to assume charge of the summer office at Yosemite for the season. His place was filled by B. F. Kenny who had just returned from a search after health among the orange groves of Los Angelos. While there he worked a short time for the Atlantic and Pacific. Frank P. Brown retired from the service on short notice a few days afterward, and is still out of a job. John Curran retired, having won the fight for the position of fire alarm superintendent; all the boys wish him success in his new sphere. George takes his place as all night man. Frank B. Rae whose advent was heralded through your columns, arrived on the 21st ult., and was at once placed on the day force. Various rumors preceded his appearance among us. One to the effect that Frank was "fixed," being worth in the neighborhood of $100,000, and visited this coast not to accept a position, but merely to look around him for a suitable opening to embark in some business enterprise, filled the "boys" with envy at his good fortune. Another, that he was to be our new manager, was pretty generally believed. Frank seems to be a good boy, and is highly esteemed among us already for his many personal good qualities as well as for his scientific attainments, notwithstanding that he claims not to be worth so much coin. The genial Ventor has returned to us after three and a half months managership at Stockton, Cal., where he relieved T. F. George, transferred to this office. "V" didn't like the close proximity of the Lunatic Asylum, had an idea it might be catching. Ben C. Shearer from Sacramento, a right good and true man, has taken the Stockton office. Charles T. Dozier, for two years manager of this office, resigned about April 15th, to become a candidate for the office of Fire Alarm superintendent, but the Board of Supervisors showed a decided preference for our genial and handsome all-night man, John Curran, and elected him by a "large majority." What is unanimously conceded to be a wise selection has been made in the choice of our new manager, Mr. Flemon Drake, who has held the reins over us for the past two weeks. He is a kind, courteous gentleman, and although a strict disciplinarian, is not likely to keep the check tighter than is good for us. Already several changes have been inaugurated which are likely to prove beneficial to the service. A short sketch of Mr. Drake's career may not prove uninteresting. In April, 1864, he entered the service of the Western Union Company as day operator at Omaha, Neb., where he remained until the following January, when he was appointed manager of the Central City Colorado office. In November, 1865, he returned to Omaha, and accepted the position of cashier at that office, which he held until the strike occurred in January 1st, 1870. Mr. Drake, being in with "the boys," was out for seven months, when he received the appointment of superintendent of supplies for the Third district, headquarters at Omaha, where he remained until 1873, when he was transferred to Salt Lake as Superintendent Hibbard's secretary. In August, 1875, he came here to act in a similar capacity for Superintendent Gamble. The Operator is much relished here, and the boys growl when it fails to arrive on time.

"Spring."

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A Pleasant Book.—"Lightning Flashes and Electric Dashes" is the name of an exceedingly interesting volume recently published by W. J. Johnston, of this city. The book consists of a large number of short, bright, lively sketches from the pens of the best telegraphic writers, with contributions from several well-known outsiders. Among the latter are Charles Barnard, editor "World's Work," *Scribner's Monthly*, Benson J. Lossing, LL.D., and others. The telegraph business during the last twenty years has grown to immense proportions, and among its members, who, as a class, are keen, sharp, intelligent men, have been developed many admirable writers. The present handsome volume reflects credit upon the profession, and as an endeavor seems to have been made to avoid all technical terms and expressions not understood by the general public, we think the book cannot fail to have a large sale among outsiders. It does much to dispel that halo of mystery which surrounds the "art telegraphic," and gives one a pleasant insight into the hidden secrets of the telegraph office. The articles are so ably written throughout that all who peruse the book must be charmed with it.—*New York Dispatch.*

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Washington Notes.

The new reduction in salaries here effected by a forced "laying off" of operators only still continues, and causes general discontent. It is now positively asserted that we are to have a new office this summer, which will be first class in every respect. If the Western Union needs a new office anywhere it surely needs it here, our present one being but little better than a barn. Charlie Sands, one of our branch office men, died this month after a few months illness. George Sawyer has accepted a position in the New York office, he left May 10th. J. B. Austin has been compelled by general debility to stop work, and go to his home in Canada for the entire summer. We hope to see him next fall thoroughly recuperated. A. S. Sinnott has returned from New Orleans. Fat Jack is resplendent in a new suit, and still holds his own in spite of the hot weather. Jack says he can cut down in anything but flesh. We believe him. Last year's straw hats are quite fashionable in the office, the "laying off" process is evidently a bad thing for hatters. "Lightning Flashes" has arrived, and the verdict is—"simply immense."

The Western Union is about to construct a line from Pittsfield to Lanesboro, Mass., commencing work the first of June.

"Thou canst not say I did it."

Office of the New York Associated Press,
May 16, 1877.

To the Editor of the Operator:

In an article, copied into The Operator from the Philadelphia *Inquirer* recently, it is asserted that Mr. Boileau sent four hundred and forty words in ten minutes, which were copied by me. On the day when these speed tests were made, the object of which was to demonstrate to a number of experts the capacity of a single wire, the senders were Messrs. P. V. DeGraw of Washington, E. C. Boileau, then visiting in Philadelphia, and Mr. F. N. Bassett of New York. It is my impression that Mr. Charles H. Davis, now of Chattanooga, copied from Mr DeGraw, who made the above-mentioned average. Mr. Boileau was not in practice at the time, and contented himself with equaling Mr. DeGraw. The object of this note, however, is to transfer from myself to Mr. Davis the credit of having copied the fastest sending of the day by whomsoever done. Again, I wish to put on record that, for a unique and musical rendition of the Morse alphabet, Mr. Bassett certainly eclipsed both Messrs. Boileau and DeGraw, though we have no record of the time made by him.

Very respectfully,
W. P. Phillips.

PERSONALS.

Miss Hattie Wilcox, late of State Line, Mass., is now operating at Canaan, N. Y.

Frank Madden is still working for the Des Moines Valley R. R., at Gowrie, Iowa.

Robert E. Hayes, of Omaha, Nebraska, is now with the Western Union at Kansas City, Mo.

H. M. Smith is operator in the new office of J. B. Chapin, assistant superintendent of B. and A. R. R. at Greenbush.

Mr. William H. Hamaker, night press report operator at Reading, Pa., was in Philadelphia on a visit last week.

The many friends of Miss Emma Manley will be pleased to know that she is now operator at the new Springfield up-town, "K" office.

George H. Bowker, formerly manager of the A. and P. at Buffalo, has accepted a situation on the Western Union day force, same city.

"Barbers chairs" was received "barbois chacis" by one of the Buffalo night heavy men while scooping in forty cents an hour at high noon.

Mr. Willie A. Fenn, train dispatcher Pennsylvania railroad, Richmond Junction, has been transferred to same duty nights at Jersey City.

Miss Flora Brewster has resigned her position on the Standard Oil Company's lines, Cleveland, and accepted a position with the Western Union at Buffalo.

Elias E. Hughes, after a year's recreation at school, has returned to his first love, and now artistically represents the C. and N. W. R. R. at Grand Junction, Iowa.

Mr. C. H. Robinson, an operator of Utica, N. Y., had a desperate encounter with a burglar on the morning of May 20th, in which he displayed great coolness and nerve.

D. K. W. Amity, N. Y.—Use for your line three-quarters of a mile in length, rounders wound with number twenty-six wire, (Brown and Sharp's gauge), and six cells gravity, or Callaud battery.

Bacon J. McQuinn of Low Moor, Iowa, writes, "Enclosed find $1.50 for "Flashes." I have read the advertisement for weeks without being seduced, but that scene on a Jersey railroad would fetch any one.

It may interest some to know that the author of "Playing with Fire," an exceedingly sweet, pathetic, little sketch in "Lightning Flashes," is the young lady operator at the railroad depot of a pretty Massachusetts village.

Mr. Clarence Wooster has been transferred from the night office of the C. P. R. R., at Cisco, to the position of manager at Auburn for the same company. William Teague, late of the U. P. R. R. succeeds him at the former place.

Albert Abrams has resigned from the Western Union Tenth and Chestnut Streets office, Philadelphia, to accept a more lucrative position with the Atlantic and Pacific. He carries with him the good wishes of all his associates.

George Kellogg, an old timer for thirteen years manager of the Kalamazoo, Michigan, office, has resigned that position, and in order to secure desirable treatment for an invalid wife, has accepted a position on the Western Union day force at Buffalo.

Mr. F. E. Janowitz of the A. D. T. office, Sixth and Callowhill Streets, Philadelphia, who has been at home in Cleveland for some time on account of sickness, has returned to his old position restored in health. He reports that the A. and P. Co. has a very courteous and efficient staff in Cleveland, and that business at that point is just now very lively.

"I wish to say that I am more and more pleased with your paper every issue. It is good all through — like the independence of spirit that shines out in it. This evening I expect to attend our Y. M. C. A. prayer meeting; the subject for conversation will be "prayer." As I opened The Operator to-day, the words, "Prayer is the key of the morning, and the bolt at night," caught my eye. What a beautiful thought to carry to that meeting! May you prosper."

Oakum Pickings.—The following in reference to Mr. Phillips' book is from a gentleman whose name has become a household word to the telegraphic fraternity. "'Oakum Pickings' grows better with age—like wine when it is *red.* I have read some of the sketches over and over again, and they are really beautiful. They will live, Walter, and shine, long after you are 'under the daisies,' and forgotten by the mass of friends you have to-day. I wish I could leave behind me as bright a 'trail.'"

General Grant was given an enthusiastic "send-off" from Philadelphia on the 17th ult. The revenue cutter Hamilton with Mrs. Grant and a brilliant party aboard, the steamer Twilight with Gens. Grant and Sherman, Col. Fred. Grant, Governor Hartranft, Mayor Stokley, ex-Secretaries Fish, Borie, Robeson, and Chandler, and a fleet of excursion steamers and private yachts accompanied the steamship Indiana to Newcastle. Messrs E. L. Maize, H. A. Wells, and J. Christie represented the telegraph on the Twilight.

BIRTHS.

To C. E. Mayne, of the Western Union Telegraph office, Omaha, Nebraska, a son, first edition.

MARRIAGES.

Tarrington—Sebastian.—At the residence of the bride's uncle, Benjamin Sebastian Esq., Cincinnati, Ohio, Saturday, May 12th, by Rev. Dr. Stratten, R. E. Tarrington, Superintendent Telegraph, A. T. and S. F. R. R., to Miss Marie B. Sebastian.

Badger—Shrecongest. — At Kittanning, Pa., Sunday, May 20th, by the Rev. Mr. Sleppy, Julian D. Badger, operator for Union Pipe Co., Karns City, Pa., to Miss Jennie Shrecongest, of Kittanning.

Hibbard—Howard.— At the residence of the bride's father, Thursday Eve, May 24th, by the Rev. M. Newkirk, Mr. J G. Hibbard, of the Philadelphia Local Telegraph Company, to Miss Mary Howard, of Philadelphia. No cards.

Smith—Peters.— At Babylon, L. I., May 16, 1877, by the Rev. A. E. Blake, G. Clinton Smith, agent and operator, Long Island Railroad, Islip, L. I., to Miss R. Emma Peters of Pleasant Valley, N. Y. No cards. The happy couple have the best wishes of their telegraphic and railroad friends.

DEATHS.

At his home in Liberty, Va., May 23d, of consumption, Samuel J. Hoffman, formerly chief operator of the Western Union Mobile, Ala., office.

May 1st, 1877, at Florence, Arizona, of smallpox, John Carroll aged eighteen. Mr. Carroll learned the art at San Diego at the office of the W. U. Tel. Company, then in charge of William E. Smith, and proved a success as an operator. He was employed at Yuma on the military telegraph line before it was transferred to the Signal Service Department. He enlisted in the Signal Service in February, '75 and worked at many offices in Arizona, always making firm friends by his attention to business, and courteous and civil treatment of all with whom he came in contact. He died universally regretted by all the operators on the line, and numerous friends in California and Arizona. His parents reside in San Diego. His Florence friends are erecting a handsome monument over his remains.

Clix.

The Quadruplex Lawsuit.

This suit, which promised from its commencement to be a lengthy one, still occupies the attention of the Superior Court.

The plaintiffs placed Mr. E. H. Johnson on the stand on Monday, 11th, and rested their case at the close of his testimony.

The evidence of Messrs. E. L. Quimby and P. F. Wesson relative to the course of the applications, etc., in the Patent Office, was taken for the defendants before their opening argument was submitted, as these witnesses were compelled to leave town.

Messrs. J. T. Murray and L. W. Serrell occupied the stand during the 16th inst. Their evidence related to transactions with Mr. Edison, etc.

Mr. Orton took the stand also for the defendants on the 17th, and retained it nearly a week. His examination was very long and exhaustive, but no points worthy of general notice were elicited. The week closed with Mr. G. B. Prescott upon the stand, whose testimony, however, was very brief.

The suit will hardly be prolonged beyond next week, and its result will probably be known before our next issue.

* * *

WE are pleased to notice that Mr. J. E. Fenn, for several months past engaged in the development of Elisha Gray's telephone, has been promoted to a position on Mr. G. B. Prescott's regular force. Mr. Fenn for the present remains at Buffalo, where we understand he has enough to do in the way of keeping wires straight and repeaters in order, to prevent his falling into mischief. The men in this city who work the Chicago and other through wires inform us that the wires passing through Buffalo have never worked so satisfactorily as since Mr. Fenn has had them in charge. Besides being an expert electrician, Mr. Fenn is a very genial and agreeable gentleman, and we have no doubt his many friends will heartily join us in wishing him every success in his new position.

* * *

THE third edition of "Oakum Pickings" is having a very extensive sale. The paper on which it is printed is thick and fine. It contains the same steel engraving as the cloth edition. The cover is heavy and strong, and, altogether, it is a very handsome book, and certainly cheap at 75 cents. "Lightning Flashes" and "Oakum Pickings" are mailed to the same or separate addresses for $2.00, and many order both and save the quarter.

* * *

ATTENTION is called to a new feature in the Scientific Department, electro-mechanical movements. Very many of these movements have been devised, from time to time, for particular purposes, and afterward, when no longer required, thrown aside and forgotten. Their reproduction and preservation in this shape will be welcomed by telegraphers and constructors of electrical machinery.

* * *

WE have received from Messrs. Homer Lee & Co., the engravers who get up the handsome invitations and tickets for the New York Telegraphers' Association, a very fine steel engraving of the new steamer Massachusetts, of the Providence and Stonington line.

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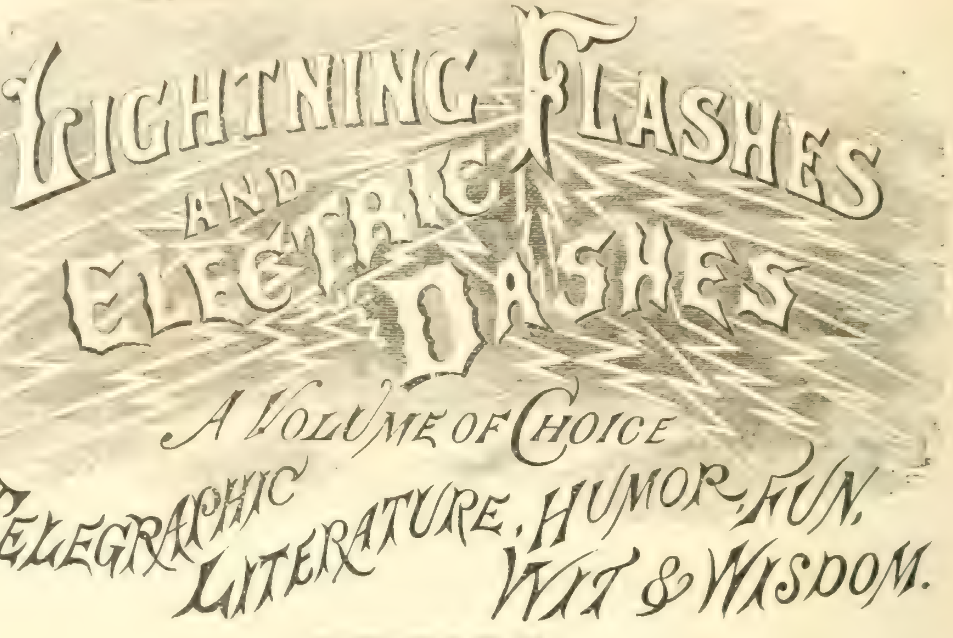

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Contents of "Lightning Flashes."

"The Volcanograph," by J. Christie, illustrations: Give them another turn, urged the Doctor—But the Volcanograph cut them short—"A Leaf of Autobiography," by John Oakum; Biography of E. O. Chase, (Nuf Ced), with Portrait; "Prof. Morse and the Telegraph," Benson J. Lossing, LL.D.; Illustrations; Samuel F. B. Morse (from a Photograph by Sarony)—Morse's First Recording Telegraph—Facsimile of the First Daguerreotype of the Face made in America—Facsimile of the First Telegram, with a Facsimile of Prof. Morse's Indorsement of it—Morse's Residence at Locust Grove; Biography of D. C. Shaw, (Oney Gagin) with Portrait; "The Telegraph Dispatch, a Story of Telegraphy in the Early Days," by J. D. Reid; Biography of Joseph Christie (Werner) with Portrait; "Wives for two, or Joe's Little Joke," E. O. Chase; "$1,000 Reward—My Foot Race with a Telegram," Ralph W. Pope; "Leander's Tour of Investigation," D. C. Shaw; "Congressional Investigating Committee;" "Song of the Wire"—Poem; "Some Grave Thoughts;" "Kate—an Electro-Mechanical Romance," Charles Barnard, *Scribner's Monthly*. Illustrations: A handkerchief is quickly flirted in the air—the girl sat in the fireman's high seat—Kate unrolled the wire and he took it up—she fell into his arms senseless and white; "Out of Adjustment"—Poem, G. W. Russell; "George Washington Cribbs' Telegram," Joseph Christie; "A Perilous Christmas Courtship, or, Dangerous Telegraphy," J. M. Maclachlan; "Playing with Fire," L. A. Churchill; "Thoughts for Serious Moments;" "A Slight Mistake," L. A. Churchill; "The Telegrapher's Song," J. A. Wyllie; "The Te-leg-rapher (Illustrated) Joseph Christie; "The Vow of the Six Telegraph Operators," G. W. Russell; "Some Oxberience mit a Railroats," C. E. Watts (Yosef); "Scrapes," Geo. H. Bliss; A Reminiscence (Illustrated) Joseph Christie;" "Poor Dick" (Illustrated) J. A. Clippinger; "The Telephone"—Poem, James Walton Jackson; "Cabling across the Atlantic;" "Snags," Geo. H. Bliss; "How a Signal Service Man Lost his Sweetheart;" "A Centennial Telegraphic Romance," W. J. Johnston; "By Telegraph"—Poem; "An Evening Reverie," W. P. Phillips; "What Came of being Caught in a Snow-storm," Ned Kent; "Into the Jaws of Death—a Telegraph Operator's Story," H. Van Hoevenbergh; "Hamilton Dobbs," W. C. Cherry; "Scenes and Incidents in a Superintendent's Office," Tracy Barnes; "Our Night Car," Joseph Christie; Lightning Anecdotes;" "A. D. 1900" (Illustrated) J. J. Calahan; "The Quadruplex" (Illustrated) Joseph Christie; "Putting 'Ile' in the Batteries" (Illustrated) Joseph Christie; "A Ludicrous Mistake;" "The Carnival of Oshkosh—a Tragedy in three acts," T. C. Noble, Jr., (Chops). Illustrations: three full page pictures, drawn by J. J. Calahan.

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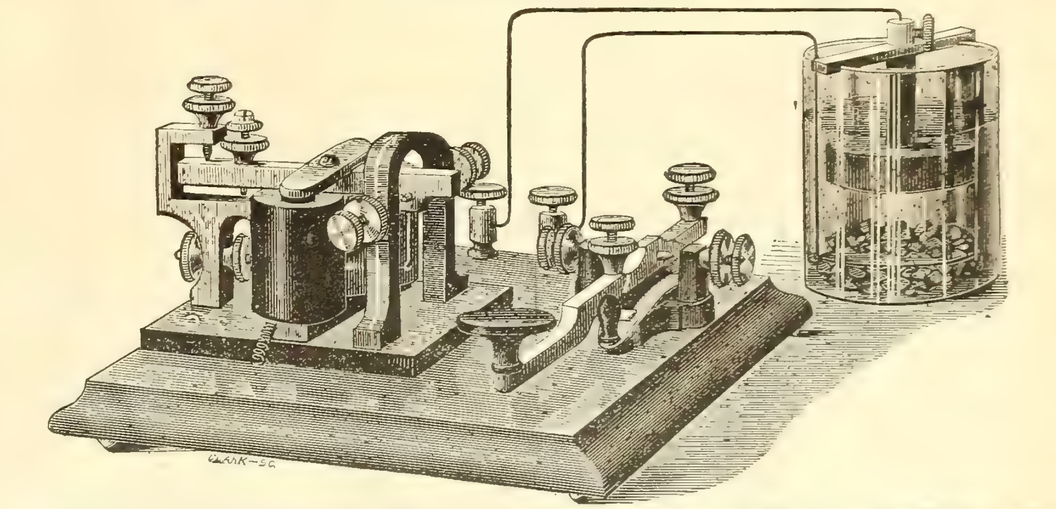

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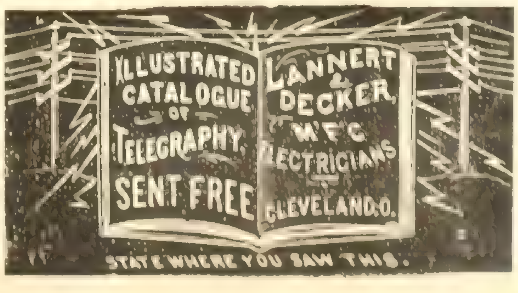
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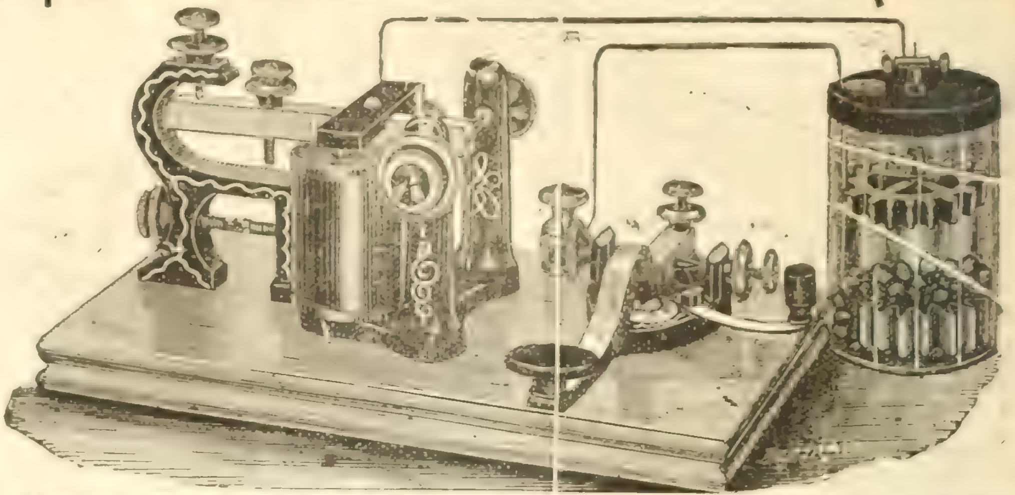

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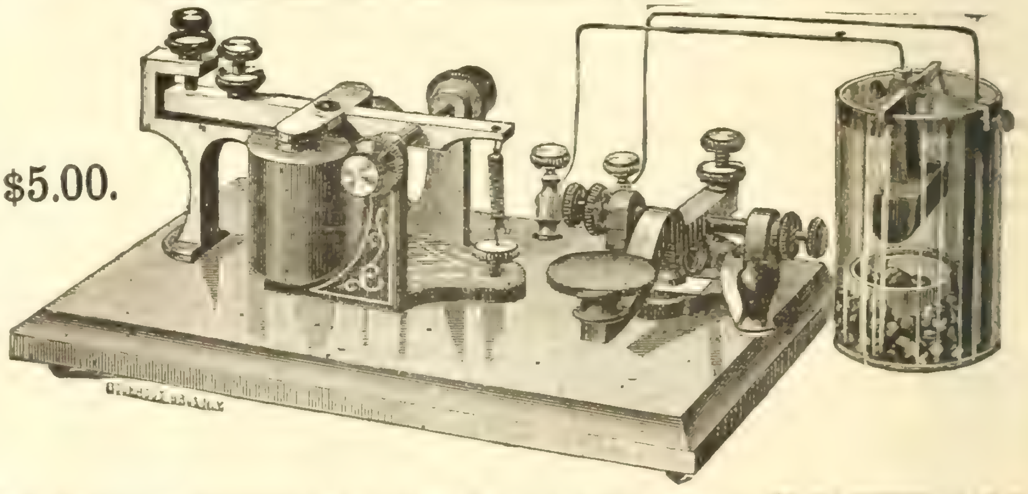

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The OPERATOR

A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

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THE OPERATOR.

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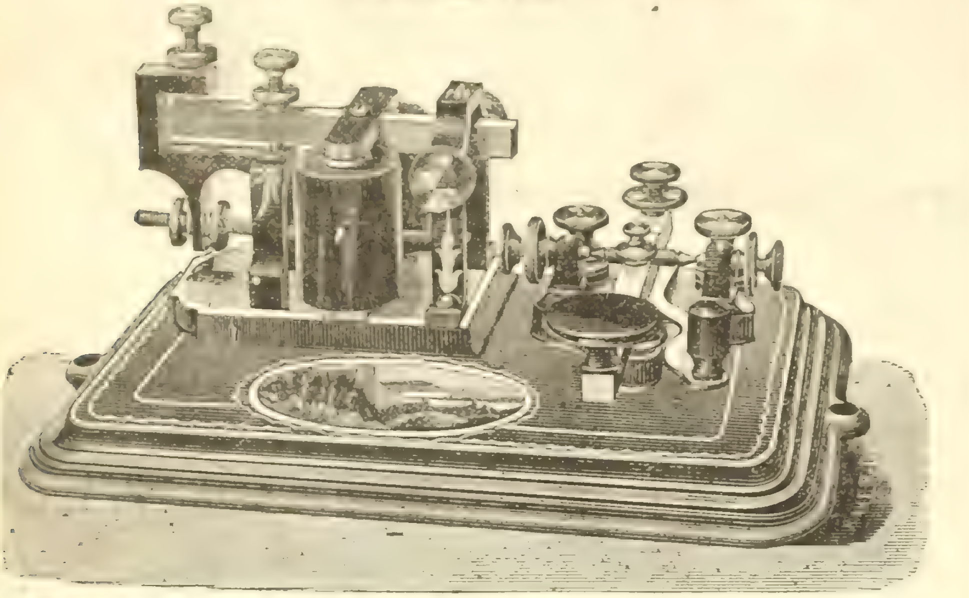

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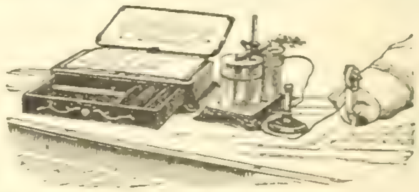

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THE
OPERATOR
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY

June 15th, 1877.

Volume VII. Whole No. 80.

In Memoriam.

TO J. R. MILLS, DECEASED.

A breath of sadness in the air of June,
  A solemn stillness reiging all around,
With sighs and tears for this young life, so soon
  Cut off from Earth. Each trifling sound
Serves but to impress on our minds to-day
  The solemn import of the present scene;
Our hearts are heavy, and we scarce can pray,
  As tearfully we gaze upon the face serene
Of him who meets with us on Earth no more,
  Whose bark has drifted on the unseen shore.

THE PREACHER.

"Weep not for him whose mortal form you view;
  He is beyond Earth's trouble, toil, and care.
Think of the future life YOU will pursue,
  Work your salvation out by deeds and prayer.
Death is not terrible, 'tis but transition
  Out of this world of ours into another;
And to believing ones, but the fruition
  Of their most cherished hope. Earth's our mother;
We must return to her. But, for a time,
  Live then, friends of mine, lives so pure-hearted,
Show by your faith and by actions sublime
  That you have learned from the soul just departed
The true goal of life. May we who remain
  Give proof to the world that he died not in vain."

PEPPERTON.

TRENTON, *June 3d*, 1877.

* * *

Splinters.

A PLEA FOR THE PUN—MR. UHLFELDER'S SPECIAL—BARNEY'S DUSKY SUBSTITUTE.

Those who carp at Thomas Carlyle are apt to cite as a proof positive indication of his inconsistency, that he is, past present and future, an exponent of the theory that silence is golden, and yet he has written more and written better than any man of his time. So it seems to me, Oliver Wendell Holmes, when he made a raid on punsters, was exceedingly inconsistent, for he straightway proceeded to write an essay entitled "A visit to the Asylum for Aged and Decayed Punsters," in which he gave us some of the best specimens of good punning since the days of Thomas Hood. I am in full accord with Mr. Holmes, so far as his strictures apply to that disagreeable class of persons who listen attentively to a conversation between others only to interrupt it, whenever they see an opportunity to twist a word and give it a significance other than the one intended. These persons should be kicked out of society—they are burrs on the coat tails of a conversation, and an annoyance to every right minded person. But I do not agree with those who, never having made a pun in their lives, elevate their noses at a good one, and dismiss it with the trite remark, that punning is the lowest order of wit. Even admitting that bad puns are a nuisance, we have no less an authority than Charles Lamb for the apparently paradoxical statement that the worst puns are the best ones, and it would seem that he spoke prophetically, as it were, for his own witticism put in the form of an inquiry to a man whom he met with a rabbit in a box, and of whom he asked, "is that your own hare or a wig?" has been remembered and quoted to the present day. We hear better puns than that often enough, but for their own sakes it is unfortunate that they were not made by Charles Lamb. If, for example, a pupil of Paganini had expressed his willingness to practice if he only had an "E" string, and Paganini replied, "I regret that I am not a woman that I might furnish a knee string for you!" the joke would have been remembered through all time. On the other hand, had the great violinist wanted the string, and had his pupil made the pun, who would have taken the trouble to record it? Indeed, it makes a great deal of difference whose ox is gored in this world; little things said by great men become immortal. I am inclined to think that the pun, like any other form of witticism, is not easy to produce, and the fact that a theatrical audience or an intelligent company in the drawing-room yields a smile whenever a good one is made, is sufficient indication for me that the pun is not the lowest order of wit. Very few great men, who have made a name as humorists, but have found the pun a very faithful ally to the end of achieving final fame. Swift, Butler, Curran, Sheridan, Hook, and, above all, Shakspeare. It is sometimes, I think, a little disturbing to find in the elegant phraseology of the latter's plays a pun so pat, and yet so decidedly out of place, that it turns tragedy into farce. But it must be admitted, that it indicates that Shakspeare valued the pun—apparently he could not resist the temptation to make one whenever it came convenient. With all his regard for the fitness of things, he failed in the one particular of keeping his brilliant and elevated utterances clear of that especial triviality. John Paul, describing a fashionable young lady, builds a comic theory of her being propelled and kept in position by a set of wheels and pulleys properly concealed, but all powerful in effecting a fashionable gait. Referring to her peculiarly artistic style of locomotion, he says that she did not walk so because she was proud, but because she was pried, and, he adds that she might be said to travel in cog. It is probable there are people who would not laugh at John Paul's inimitable fooling, but the same persons if they should read Mark Twain's "Innocents Abroad," would renounce it as a tissue of lies, and they have no confidence in the nursery tale of the old woman who rode her broomstick up to the moon. They are people without imagination and without that ray of merriment in their natures, which, like a beam of sunlight penetrating shady places, makes sunny and delightful our work-a-day lives—existences none too bright and cheerful, even with the maximum of all that is droll, merry, and laugh-provoking given our best attention.

There is a certain German publisher named Uhlfelder, in a south western city whose paper is to-day a patron of the Associated Press. How it came to desert the opposition was related to me by a gentleman connected with the American Press Association, whom I met the other evening at the Lotos Club.

"I was sitting in my office one morning," the speaker said, "when a burly Dutchman entered, and inquired for the agent of the *newses;* upon my assuring him that I was authorized to transact business, he proceeded to say that I must cut off the *Volksblatt*— his local contemporary —"or py shings we will both stay owert." He gave his reasons for his decisive stand on the question as follows: "I vas at der Saengerfest in Cincinnati, and ven I find der *Volksblatt* had no mens there, I make me up a fine sbecial. Ven he was written I pay five tollar for a hack to dake me to der offers off der Atlantic and Bacific Delegraph Gompanies, and den I file him and rush right away back to der hotel. I smoke a cigar, drink about ockt glasses of peer, and go to bed as happy as a mouse. Vell, der next morning ven der drain comes in, I was by der depote to buy copies of my baper, and der *Volksblatt*. I take my baper so," (and picking up the *Sun* he placed it under his arm), "for I know *my* baper was all right. Then I laugh when I think what a nice beat I shall have on der *Volksblatt*, and I opens him. Vell, what you thinks? hey? What you conceive? *my special was dere in der Volksblatt!!* And when I opens my baper, Helen Blazes! dere vos not one line in it about der great Saengerfest at Cincinnati. Now I say unless dot *Volksblatt* gets owert of der American Bress I shall go owert too. Don't it?"

It was in vain that the narrator of the above endeavored to explain that the telegraph company was responsible for a mistake in the delivery of a dispatch, and not the Press Association. He proceeded at length to show Mr. Uhlfelder, that the telegraph company being a common carrier, and the News Association merely one of its patrons, the latter could not justly be held to answer for the non delivery of a special, nor for its delivery to the wrong paper. He regretted the mishap, of course, but really it did not furnish any ground on which he could properly exclude the *Volksblatt* from the news facilities. The speaker was interrupted at last by Uhlfelder, who maintained that, "one paper must go owert, or we don't both stay in," and he added.

"You see dey was so mean on brinciples that I can't stand it much sooner. I will tell you how dey treat me. I sell my baper for dwendy cents a veek, and dey sell theirs for dwenty-five cents, and dey won't oxchange mit me. They buy my baper, and make me buy theirs to get that egstra five cents. And vorse than that. One night when the Franco-German war was going on, I sat drinking peer, and Shones of der *Volksblatt* come in and he say, 'trink a glass of peer mit me?' and I answer dot I vill trink vith him off he trinks mit me afterward; so I won't be under any opligations to him. Vell, he agree to dot, and bretty soon I say, speaking cautious like a cat, 'Shones, vill you got out an egsdra to night?' And he answer, 'oh no! egsdras are blayed owert, and what you thinks? hey? what you conceive? Why, he keep me dere trinking peer until I heard der boy on der street crying 'egsdra *Volksblatt*, and I rush off, by shings, and get owert *my* egsdra five hours pehind it."

Mr. Uhfelder's mind was fully made up. These were only a few of his grievances, and the news concern which had profited by his revenue had to let him go his way, and he went over to the Associated Press at a large expense, as his only means of cutting loose from the seductive "Shones" and the only paper in that southwestern city which had a special about the Cincinnati Saengerfest.

Assuming that many of those who take THE OPERATOR have read "Oakum Pickings," — an assumption somewhat egotistical, I admit, but I am persuaded to regard it as a correct one—assuming this, I beg to re-introduce that cheerful tonsorial Ethiope, Mr. Thomas Johnson. When he had saluted me as Mr. Drake, and I had transferred my patronage to another shop, I supposed our acquaintance had ended. But I was in error. Though lost to sight I remained dear to the memory of the jocose Tom. His affection for me was latent, however, rather than active, and it was only when duly stimulated by ardent spirits that his regard moved him to visit me. But once mellow, no matter how late the hour, provided the office was open, Mr. Johnson was sure to do three things. The first was to brush past the clerk who guarded the gate at the counter, and invade the sacred precincts of the operating room on the plea that he sought to see me by appointment; the second was to tell me a glowing tale about his going to sea again, and the third to write a telegram which he would ask me with charming *naivete* to "D H" to his sister in Philadelphia. I always assured him that his messages, which were marvels of Ethiopic composition and penmanship, containing from two to three hundred words, would "go," thus escaping his interruptions while I was at work. And I kept my word—doing his missives up in envelopes, and sending them to the post office as soon as he was out of sight. This answered every purpose, his communications invariably referring to the subject of his sister's seeing a Captain Judson of the American Line of steamers, with a view of obtaining him (Tom) a position, under the steward of the steamer Lord Clive.

One evening my night clerk, Barney Martin, was obliged to deliver a death message, by carriage, at a country village some miles away, and leaving the office at ten o'clock he arranged with Tom, whom he had encountered on the street, and who was perfectly sober on this occasion, to carry the dispatches around to the *Journal* office. Although the copy was delivered after ten o'clock by Barney, I was held responsible, under a contract with the *Journal* for several minor offices, for its safe and prompt delivery. Hence, I opened my key and told Tom the number of pages he should take on each route, and to which paper. He replied that he understood it all, said Barney had given him full instructions, and he was particularly positive that he knew where the *Journal* office was, "like a book. Yes, indeed!" So I resumed my receiving, and Thomas Johnson attended to the delivery with an air of a man intrusted with the destinies of both hemispheres. Just before midnight New York got clear, and I had lighted a cigar preparatory to a bit of rest, after six hours of steady receiving, when a boy came in from the *Journal* office with a note from the editor. I read it aghast, for the writer inquired what the row was, and said that no copy had been received since 9.45—two hours before.

"Thomas," I exclaimed, excitedly, "what have you been doing with all that copy?"

"Been bringing it around to de *Journal* office," he replied, blandly.

"But the editor says he has received nothing from us since quarter of ten."

"Dat's a lie," returned Tom, getting excited in turn. "Why, what de debble—how could it—where would I put it—I am no sneak news thief, go way—Golly, boss, you are joking for shuah, trying to scare me," and he began to laugh immoderately.

I was sorely vexed, but I waited until he had subsided, when I asked in a burst of desperation: "Where is the *Journal* office, Tom?"

"Right ober de bridge," was the quick response.

The office "right ober de bridge" was unhappily that of the *Plantation Harbinger*, a democratic daily which at that time was doing without the news temporarily, owing to its proprietor's failure to pay his assessments. Of course, I couldn't get such a God-send as two or three thousand words of news back from a lot of editors hungering for the latest intelligence, so I had as much repeated as I could get in the brief intervals when New York was clear, and after good night I begged the remainder from Boston, and had to receive it from an office boy who sent me among other things "Mutton in Paris" for *Mutiny in Paris*. However, I got patched up at last, and the editor of the *Journal*, upon learning the facts, good naturally overlooked the mishap. I went home that morning about the witching hour "when Sol throws up the golden fleece as warning," and when the birds were beginning to twitter their happy morning songs.

Notwithstanding this slight *contre temps*, Thomas Johnson never deserted me. As long as I remained he continued to be neighborly, and gave me plenty of his society. But if I were to go back now to my old stamping ground, and look for Tom, I should not find him. He has gone, and he comes not back. Like the copy he tried honestly enough to deliver, he too, has passed over the bridge. And many a more conspicuous man than Thomas Johnson might have yielded up the ghost without eliciting a thrill of such general sorrow as was felt when it was announced that he had been swept overboard in a storm at sea. With all his weaknesses, and his inordinate vanity, everybody who knew him liked him in a sort of brotherly way. Indeed, I have sometimes thought that the tropic sun under which he was born and reared must have penetrated and informed his rugged nature, since so much came from him which was bright and glad. Sweep gently, O mighty waters, above his unknown grave!

JOHN OAKUM.

The Painted Post Commercial College and Telegraph Institute.

BY WERNER.

Little as the world knows or cares of that great manufacturing town, Painted Post, Kansas, I am compelled by the very purpose to which my literary life is consecrated, viz; discovering and establishing the truth, to draw the attention of my brethern to the Painted Post Commercial College and Telegraph Institute.

At the head of this institution—I should say this *noted* institution—was Prof. Skinner, who, to convey in a more idealistic manner that he was a real live telegraph official, did very little telegraphing himself and chewed cloves vigorously with all that that implies. The ill fated students were required to pay $50 *in advance*, for which they were (in the prospectus) to be qualified for telegraphic positions in three months at $115 per month; but, in reality the understanding was that they were as usual, to spend the first three minutes in signing the papers and handing over the cash, and the remaining two months, 29 days, 23 hours and fifty-seven minutes in frantic endeavors to discover on which turnpike the Professor had walked out of town. They were also to be initiated into the mysterious art of sleeping on duty at night without detection, and of coming late successfully, and loaning out money at as high a rate of interest as any first-class man; and they were each to receive a diploma in advance, with the expected salary ($115) mentioned conspicuously therein, just as life-like and natural as a regular official document. By way of encouragement to a number of disappointed females of an uncertain age, there was a notice posted in the college that Cato commenced to learn Greek when eighty years old, and another motto aimed at parents and guardians recalled the fact that Pope wrote his "Ode on Solitude" at twelve, while a glowing reference to Bryant's Thanatopsis, published when he was nineteen, fired the hearts of what I may call the intermediate scholars. It may thus be inferred that the professor held that anyone between the ages of three and 125 who had $50 to invest, could learn telegraphy with the greatest facility in three months, and go to work immediately thereafter at $115 per month. To start with, the students were allowed to send Morse to each other—gentle, languishing, summer's eve Morse, you know—not such as produces wild commotions and furious panics in the bosom of a real $115 man on a *bona fide* commercial line, but polite Morse—Morse that floats gently over the wire smelling of verbena and ottar of roses, in which the tranquil sender stops every three words to inquire lovingly, "How do I come now?"

It is not so much my duty, however, to point out the mode of instruction adopted by Prof Skinner, as it is to record the untimely collapse of his model institution. After two weeks plain sailing, the Professor, desiring that everything should be as realistic as possible, had a stage erected in one corner of the room with a telegraphic instrument erected thereon, on the key of which any pupil called upon was to write in distinct Morse characters, *loud* enough to be heard by the remaining seventy-one members of the class, any word which might be suggested by the audience. This was what might be called a Telegraphic Spelling Bee, and to combine a due share of amusement with bad Morse, the Professor had a second-hand fog-horn introduced, which, on the failure of a candidate to write a given word correctly, was to announce that fact to the class by a terrific blast from its brazen throat.

Now, Hiran Cheep, who was very anxious, as his name would imply, to go to work at any salary, was the first to mount the platform. He announced that his $50 had not been invested in vain, and, with triumph beaming on his face and key in hand, he blushingly bade defiance to the fog-whistle. The great drawback to the affair was this: The man who was engineering the whistle had had a falling-out previously with Hiram about shoveling in some coal at the gas-works, where they had both formerly been employed as superintendents of wheel-barrow traffic, at a dollar per day; and, consequently, he was disposed to blow Hiram down anyhow, whether he transmitted a word right or wrong. But when a lady requested Hiram to signal the word "peculiar" in good Morse characters, and he commenced "6 reut —," the fog-whistle gave such a blast, right in the middle of Hiram's effort, that every one present was at once convinced of Hiram's incompetency. Hiram got very mad, for when it comes to whistling a man down with a fog-horn he is likely to feel piqued, and Hiram commenced to plead indignantly for a chance to finish, but as the fog-horn kept on screeching, and the Professor coldly voted him "out," and as he persisted in remaining to out-yell the fog-horn in an endeavor to explain the fog-horn man's personal antipathy, it was found necessary to resort to physical force to remove him.

The uproar at this point was chaotic, and as Hiram throttled the Professor on the floor, he was heard to declaim in true Ciceronian style that if, upon a fair attempt and failure somebody had hit him in the mouth with a water-melon, he might possibly have felt called upon to mention the fact in a mild way of remonstrance, but he could not reasonably be expected to keep silent for a fog-horn, blown by a personal enemy, before he had had half a show. When the Professor subsequently threw up the sponge and cried, "enough," and there was a lull in the uproar, he resumed, stating with much irony that a modest and considerate Professor, who had exacted all their savings and given diplomas in advance, might have provided a trombone or a base drum or some other reasonable signals of defeat, but—

Here the fog-horn commenced again and among the din and cries of "down, down," Hiram shouted that any base caitiff who would blow a fog-horn at him in any other spirit than one of benign Christian charity was a wanton slanderer. As the fog-horn kept on relentlessly, he threw a relay at it in a fit of abstraction, and in mistake struck a leading student—but here charity must draw the vail.

It is an ill fog-horn that blows no one any good, and when matters calmed down, it was found that the Professor had decamped, owing them $50 a piece and ten week's tuition.

On the following day an indignation meeting—at which seventeen good hats were exchanged in mistake by various parties for a like number of bad ones, and three umbrellas and eleven overcoats disappeared altogether without leaving substitutes of any kind—was held at the Painted Post Assembly building. Professor Skinner was absent, of course, and he was denounced by various parties, the greatest force of whose allusions lay in their obvious truth rather than their elegance. Committees were appointed, with power to send for persons, papers, and refreshments—a collection being taken up to defray their expenses—and resolutions were unanimously adopted offering their services to any telegraph company at fourteen dollars a dozen, and declaring the Painted Post Commercial College and Telegraph Institute closed for repairs.

A Reminiscence of Cincinnati in the Palmy Days of Telegraphy.

The boys called it the Barracks; it was in reality an old tumble-down tenement house, situated on 3d Street, near Sycamore. The room, a large square one, was rented by four telegraphers, viz: Charley Defavre, Jim McKeen, Joe Edwards, and George Stark. Hither came the sick, the needy, and the inebriate, on the principle that a "fellow feeling makes us wondrous kind." None were refused admission because of their poverty or condition. In fact, an evidence of this was a more potent *open sesame* than the mere possession of wealth; for, although the beds were but two in number, not counting an old sofa which stood on three legs and a brick, still the floor was wide, and—sybaritic luxury—carpeted; and those who came last, whether legitimate occupants or pensioners, contented themselves with those humble quarters without a murmur, doubtless thanking heaven for the privilege even of a shelter.

One cold, blustering night in January, while lying three in a bed to keep warm, a window suddenly blew open, and there came floating into the room the savory odor of fresh made bread undergoing the process of baking in the confectionery directly opposite.

Defavre impudently suggested that "a French roll wouldn't be bad, if he had a nickel to buy one," at the same time, in order to give proper effect to the assertion, striking his body which gave back a deep, muffled sound painfully indicative of emptiness.

McKeen mournfully chronicled the fact that he, too, would like a "bite," but had given his last quarter in charity to a poor blind organ grinder. This remark was received in dead silence; from which auguring unfavorably, he offered to produce the Italian, if any one wished. Defavre remarked *sotto voce*, that if, in his present state, he could lay hands on that organ grinder, he'd devour him, organ, monkey, and all.

All eyes were at last (in the darkness) turned on Joe Edwards, who, during the evening, had carelessly displayed a two dollar bill, which Defavre, soon after, attempting to purloin, found tied in his pocket with a string, showing plainly his intimate knowledge of the company he was in. Edwards at last promised to furnish the ".collateral," if Stark would go for the bread. At last, after much coaxing, kicks, and blows, poor Stark was at last thrust out of his warm quarters, and, after hastily dressing, departed on his errand amid strict injunctions "to close the doors tight," on pain of instant death, the "gang" meanwhile holding the covers over their heads to prevent freezing.

Among the supernumeraries that night was a certain Jim Harding whom Edwards and Stark cordially despised, but, being a protege of McKeen's, was tolerated in the Barracks as a matter of courtesy. It so happened that some female admirer of Harding's had presented him with a cheap velveteen suit, in which, together with an immense oroide watch chain, he daily perambulated Fourth Street, staring ladies out of countenance, and presenting the appearance of a two-penny gambler out on a "lay." Suddenly McKeen, who stood at the window, exclaimed, "Joe, here's Stark, let's give him a bath!" Suiting the action to the word, Joe approached the window where Mac was holding a conversation with Stark beneath, and emptied the contents of a wash bowl on the poor boy's devoted head. Stark gasped for breath for an instant, and then giving utterance to a frightful yell of mingled anger and pain, rushed madly up the stairs. The boys all shouted and laughed till their sides ached, but none so immoderately as Harding, who lay on the bed kicking his heels in the air, and yelling like a madman. At this moment, Stark burst into the room, and, standing still until the noise had subsided, exclaimed, "Now, you fellows think you're mighty smart, but I don't care, I haven't got on my own clothes." Horror and consternation seized upon all present. In an instant six pairs of feet sprang to the ground, and half a dozen heads went bumping and cracking together in a vain endeavor to find a match box. Some one at last struck a light, and there stood Stark, the water dripping from his garments, and forming in little pools at his feet, and dressed in Harding's velveteen suit.

A lively passage at arms ensued for a few minutes, in which Stark came off victorious, while Harding crawled into bed, a sadder and a quieter man. I saw him next day on Vine Street, but the nobby suit had disappeared. Perhaps he had sold it, but it may be:

> A velvet suit she gave me,
>   And promised to be true;
> I took the suit she gave me,
>   And pawned it with a Jew.

C. B. JUDSON.

The Thorsdale Telegraphs.

CHAPTER II.

IT was Thursday, and rather late, before I made my appearance at the office. Mr. Thor was seated at his desk, quite busily engaged, working at something. As I entered he rose quickly, bowed to me, then offered his hand, which I took and gave a hearty shake. He glanced at the clock. "I know, Mr. Thor," I said apologetically, "I am an hour and more late."

"Miss Brown's indisposition is a sufficient excuse. You are in good time. We are rather—ahem!—used to fainting; the Smoiler young person, you know, faints twice a week at stated intervals; on her mother's wash days, I believe. The Smoiler young lady will open her key presently. Take charge of the instruments, I can dictate replies. I have quite a job here;" and he removed, bit by bit something from a newspaper which he had spread on the desk, to a table in the corner of the room, and began working with the pieces.

"Well," I said to myself, smoothing out the crumpled newspaper he had left, "I don't exactly like this sort of reception. It is a kind of affectation of indifference on his part, which is a sham. I don't care. He is a brave man, and as cool a one as I ever read of; and I want to tell him so. I cannot intimate to him, however, that Mary Brown is going to be wretchedly uncomfortable here, with her heart in her mouth all the time, and that a position as a permanent telegraph operator at Thorsdale would be just the death of her. It may be a sinecure, but a few more incidents of the character of the evening before last, notwithstanding the thirty-eight dollars a month she receives, might very much weaken her mental and physical condition, and—I wish I had never put my foot into the Thorsdale office." Then I thought my bin wanted looking after, and I went there, and in the glass found my face was all crimson. I noticed, I must confess with some pleasure, that there was a fresh bunch of flowers in the Bass' ale bottle. I took a brilliant crimson poppy, placed it in my hair, and then put it back again.

"You have broken my pipe," said Mr. Thor, from the office. "Smashed the sea-horse all to bits; cherry stem likewise splintered."

"I am so sorry, so very sorry," I said, almost nervous enough to cry. "I had no idea I had it at all."

"If a young lady expects to lie down on a pipe which she has been merely requested to hold, and thinks that meerschaum will stand such a strain, all I have to say is that her acquaintance with the physical condition of such substances is of the most meagre and superficial character. There, I give it up." Here I saw him gather up the pieces of the pipe and put them back in his drawer. "I am going out Miss Brown," he continued; "some business at the depot. If I am wanted, or anything important turns up, ring this bell,—the wires run across to the depot,—and I will come." He looked at me now, as I left my little room, with a kindly smile on his face, and in a moment was out of the office.

"Broke his pipe? I wish I could mend it. I wonder if he wants a tobacco-pouch. I might make him one, with his old sea horse on it. I wonder if there is such a thing as embroidering silk to be found in Thorsdale. By the way, I must ask permission to be absent a half hour some time to-day, so that I may thank the grocer's wife, who laid me out so nicely in the bottom of her husband's wagon, and carried me home. That accounts for the molasses on my skirts. I wonder if Mr. Thor called to see me yesterday." Then I tried to drive Mr. Thor entirely out of my mind, but though I succeeded in this, the tobacco pouch would come back. I kept on racking my brain until I got headachy, when I turned over the newspaper and read the title, the Smoilersville *Sentinel*. I waded through the outside sheets, which were filled with grandiloquent advertisements, but noticed that embroidering silks were unheralded. Then I looked inside, and this is what I saw, in the most blustering type:—

HEROIC CONDUCT!

A NOBLE WOMAN AND A BRAVE MAN;
FEARFUL ACCIDENT FRUSTRATED;
MANIAC IN CHARGE OF A TRAIN.
Full Particulars! Pass round their Names!
Excitement in Smoilersville!
Meeting of Citizens!

I then read a wonderfully inflated account of the occurrence of Tuesday, and was horrified at seeing my name, Mary Brown, scattered about in the most lavish way, from beginning to end of three whole columns; how I had clutched the drunken man's pistol, who was described as "the maniac engineer and Herculean ruffian;" how I had wrestled with him; how my "beautiful hair had streamed down my back, disheveled in the mortal strife;" and how I was now at the point of death from the wounds I had received when "battling with the Herculean engineer and maniac ruffian." I tried to see what amount of truth there was in it. If any reliance could be placed on the account, Mr. Thor had been just in time; for although the engineer had slackened the speed of the train somewhat, he was in the act of letting on a full head of steam again when Mr. Thor had grappled with him, and had mastered him. I felt immensely provoked at the very false notoriety I had acquired, especially when at the conclusion I read that the Smoilersville people had determined that "a substantial token of their esteem and regard should be presented to Miss Brown and Mr. Thor," and that subscriptions were invited, which might be left at the office of the Smoilersville *Sentinel*. I became so wretchedly uncomfortable over it all, that it was a relief when the sounder commenced working. It said:

"Smoil to Thor. Heroic preserver of hundreds of lives! How can I appreciate the noble work done! Mother hopes you will join the church after this, for you are destined to a noble future, some great end and *ame*. Hearing of your *narrer* escape has put me all in a shudder. EUSEBIA."

I could not say the message was exactly an important one, and Mr. Thor was so uncertain in temper that he might scold me if I rang the bell for him. While I was hesitating, the instrument again started. It said:

"Was last message received? Please do, do, do reply. E." Then there was a pause and it resumed: "Pray do not be haash [*harsh?*] with me. Let me, as a poor, confiding woman, twine a crown of laurel to place at your feet. Do not stamp on it." Here there was an hiatus, and it went on: "Watkins just in; will use the wires; need not reply now. E." Then came a rattling message: "Is Thor at station?" My answer was, "No. Brown." Now came galloping over the wires, "O. K. Glad to make Miss Brown's acquaintance. Miss Brown is a trump. Jackson Watkins takes off his hat to her. Howdy-do, Miss Brown? Tell Thor, mixed deputation from directors of both roads coming to Thor to-day, to wait on him; likewise our long-winded mayor. Champagne, cigars, chickens, sardines, and general spread, with niggers and ice-cream, on the twelve forty train. Tell Thor to write a speech. Miss Brown must do it, too. Big thing. Miss Brown may count on Watkins until something freezes over, say crack of doom for short. She is plucky, and so is Thor. Whole office down to messenger-boy and line man send compliments, as does J. WATKINS."

I could stand it no longer, so I rang the bell loudly, more vigorously than I should, for in a moment came Mr. Thor.

"Well, what is the matter, Miss Brown?" he asked.

"Two or three messages which I have copied," and I handed him the lady's message.

He scowled fearfully. "If I am to be rung up for trash of this kind, I shall never have time to attend to my work at the depot," he said, rather snappishly, "Is that all?"

"No, sir. Mr. Watkins sends a message, here it is."

He read it, and commenced stamping up and down the office like an infuriated mastodon. "The idiots, the dunces, the asses! That confounded Smoilersville *Sentinel*! Did you read the stuff?"

"I did."

"Pack of lies."

"No, not all of them. What they said about me was fearfully false."

"I beg your pardon."

"Pardon me, sir, but it was."

"You are the heroine of a dime novel. You shall receive the deputation."

Now was my chance, and I determined to make the most of it. "Mr. Thor," I said, very demurely, "I wanted to say to you, this morning, how well you behaved on Tuesday, and how much I respect an action"—

"Was that what you rung the bell for?" He looked at me crossly, but there was so much earnestness about my manner that he now took on an aggrieved mien, and said, "Miss Brown, I should hardly have thought it, from the limited acquaintance I have had with you, that you would have joined with Smoilersville in doing what, you certainly must be aware, can be nothing else than an annoyance to me."

"I will never mention the circumstance again; drop it entirely out of my mind, if you desire it," I said. "At least, I will try to," was my mental reservation.

"But, Miss Brown, though you are perhaps unaware of it, if you had not opened the door precisely when you did, he might have shot me. I saw he had an ugly knife, but I had no idea he had a revolver until I heard the explosion. I did not notice how you managed, but it seems to me you must have knocked the pistol out of his hand, or turned his arm. Of course he was no match for me; this I knew all the time. His drunkenness gave me every possible advantage. So you see, Miss Brown, *nolens volens*, you are a heroine. Here is where the ball went through the ceiling. With all these proofs of prowess, Miss Brown must certainly receive the deputation in my stead."

Mr. Thor seemed to stagger for a moment under my load of words, and then said, "Miss Brown, you look honest. It would be the most cruel thing in the world, if you gave utterance to anything you did not implicitly believe."

"Mr. Thor," I said, getting incensed now in my turn, as he seemed to be quite in earnest, "if you mix up my name in any way whatsoever with this disgusting business, or put me in a position of false notoriety, which I should despise, I will quit Thorsdale instantly."

"And, pray, where will you go to?" he asked, quite demurely.

"That is none of your business," I answered, tartly.

The conversation was becoming acrimonious, so I went in high dudgeon to my little room. There I pulled a rose from the bunch of flowers, and put it in my bosom. I would keep that, at least.

"Miss Mary Brown," said Mr. Thor, in a rather sing-song voice, after a pause of at least ten minutes, "I covenant and agree to do, at least for the present, that is, for the next twenty-four hours, exactly as it shall suit your august and somewhat exacting pleasure. Being justice of the peace of Thorsdale, likewise notary public and constable, I will, if you please, write it all down officially, and swear to it and sign it in my triple function."

I did not answer.

"You cannot leave, you see," he continued, "without great detriment to the State; you will be wanted to give your testimony in this business."

"Is Kettridge dead?" I gasped out.

"Not quite. Of course there will have to be an official examination and consequent whitewashing, and as executive officer of Thorsdale I am quite capable of issuing a warrant for your arrest. There, what do you say to that? Look up at the left hand corner of the map, and tell me what you read there, under the plan of a building like a gridiron."

"A prison," I said, reading it off.

"That is where you will have to languish."

"A prison!" I exclaimed, as I examined the map. "How queer! for next to it is a public garden and park. What a strange fancy, to put a prison there."

"Not at all. The locality for that prison took me a long time to decide upon. Alas, that there should be squalor and misery in every town!"

"I accept the agreement," I said, as I came out from the closet; "you are to do my bidding; that is understood. Then, firstly, you must reply to Mr. Watkins, and inform him that you will be prepared to meet the deputation."

"The humiliation of being put in an omnibus, with a band of music on top!" Here he groaned aloud, and seemed inclined to be [illegible]. I felt that I must get my mind away from the subject of the deputation, if but for a moment.

[TO BE CONTINUED.]

HALF of the town of Walkerton, Ont., was destroyed by fire May 18th. The loss amounted to $[illegible],000. The Montreal Telegraph Company office was destroyed.

THE OPERATOR. A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

June 15th, 1877.

DURING MR. JOHNSTON'S ABSENCE IN EUROPE, correspondents will please address all matter for the literary department of the paper, personals, items of news, etc., to JOSEPH CHRISTIE, P. O. Box 2675, Philadelphia, Pa.

Subscriptions, orders for books, etc., or in connection with THE OPERATOR Purchasing Agency, and all business communications generally, as well as New York City items, to W. J. Johnston, Publisher, P. O. Box 3332, New York, as usual, to whom Post Office orders, drafts, etc., are to be made payable.

Correspondents will do much to facilitate the business of the paper by bearing the above instructions in mind. Readers are cordially invited to forward items of news; also, when anything likely to interest telegraphers appears in their local paper, they will confer a favor by marking the article, and mailing the paper to J. Christie, P. O. Box 2675, Philadelphia, Pa.

WE regret that Mr. Van Hoevenbergh's article did not arrive in time for publication in this issue.

OUR thanks are due to the profession at large for their generous response to Mr. Johnston's request to help us in keeping the paper up to its highest standard during his absence.

A CABLE message from Mr. W. J. Johnston says that he arrived at Queenstown, safe and well, on the 13th inst. Six hundred miles west of the Irish coast, they fell in with the steamship Spain, and as they were laboring with a broken shaft, they were taken in tow by the latter vessel. Two tugs took the City of Berlin in tow for Liverpool, but as Mr. Johnston had probably become disgusted with the delay, he left the vessel at Queenstown, and cables us that he has started for the Lakes of Killarney.

THIS day is a notable anniversary among us. Just a century and a quarter ago to-day (June 15, 1752), Benjamin Franklin demonstrated, in Philadelphia, a theory suggested by him years before, that lightning and electricity were the same, by drawing lightning from the clouds by means of a kite.

A CORRESPONDENT, one of the most intellectual and observant of our brethren, suggests that the managers of those offices where the operators are fined for coming late, should divide the fines so levied, equally, among those operators who have not been late once during the month. He asserts, with a good deal of plausibility, that among the many methods which have been tried, this one has proved the most effective in diminishing the number of late men.

WE are pleased to learn that Mr. John E. Zeublin is back at his old post as night manager of the Philadelphia Western Union General Office, after a winter in Florida. Mr. Zeublin has been known for many years as one of the most popular officials in the telegraph service, and we are glad to see that his business tact, executive ability, and genial good humor, were well appreciated in all quarters.

WE have before us a letter from Tocqueville, Utah, which says that ex-County Commissioner Jones, of Lincoln Co., Nevada, and a Bishop of "Zion," are down in that country on a preaching tour. Among other things, Jones told "the faithful" that Brigham Young had given them fifteen commandments, one of which was to isolate themselves from outsiders; that all the telegraph lines in the Territory had been sold to Jay Gould; that the Zion Coöperative Association owed $90,000 in the East, and to raise this money they sacrificed the telegraph lines.

THE telegraph war still goes on, characterized by the mobilizing, marching, feinting, and countermarching of the well-known, able, and wary generals and their armies on both sides. The decision of the suit of the A. and P. Co. against the S. and N. A. R. R., in favor of the former, reported in another column, opens a new field in the South to that corporation. Should more reductions in tariff follow, the Western Union will, of course, follow suit; but it remains to be seen whether such a course will result in any benefit ultimately to the operators, or, indeed, to any of the parties concerned. Time alone will show us whether such low rates can be permanently adhered to, or whether they do not tend to a forced union of interests, as was the case of the Atlantic cable companies.

◆

A Spider's Web.

We have received from an Iowa correspondent a copy of a circular issued by an alleged New York stock-broking firm, and circulated throughout the Western States, soliciting investments of capital (from $1 upward), and promising immense and sure profits. In reply to our correspondent, we say, that the parties named are not responsible, and that if he invests any money with them, he will be sorry for it. Dabbling in stocks, even on a purely business principle, is the commencement of the ruin of a great many promising young men, and just such enticing and innocent looking circulars as the one sent us by our Iowa correspondent are cunningly calculated to lead the unsophisticated fly into the spider's web.

◆

Departure of Mr. Johnston for Europe.

Saturday, June 2d, the heat notwithstanding, was a lively day on the piers at New York. The steamship City of Berlin, which for nearly two years previous to last April carried the champion pennant (having made the Trans-Atlantic trip in 7 days 18 hours and 2 minutes), took out several of the members of the American Geographical Society, a number of well-known society people, and also Mr. W. J. Johnston, the publisher of THE OPERATOR. There was an immense throng present on the wharf, including a mixed company of telegraphers; and, with the presence of a band of music and a man on the steamship, named "Jim," who shouted farewells like blasts from a steam-whistle to his tumultuous friends ashore, the scene was for a time a very exciting one. The City of Berlin is an "own sister" to the City of Brussels, which has been so unfortunate recently, so that it was not without a misgiving that we watched her gliding majestically down the bay, and many a heart beat in accord with the sweet music which could be heard in the distance playing "The Sweet By-and-Bye."

We expect to hear from Mr. Johnston at Queenstown or Liverpool before going to press, and readers of THE OPERATOR may soon look for some lively and instructive letters from the Eastern hemisphere. Mr. Johnston has proven his devotion to our interests on many occasions; but when he promptly chose between a lucrative telegraphic position and the precarious management of this paper, which was then struggling against powerful opposition for its existence, and accepted the latter position, his success among the telegraphic fraternity was assured. He has now the satisfaction of taking a trip to Europe, and contemplating one of the best and, possibly, the largest paying telegraphic newspaper property in the world. He exercises a powerful influence in telegraphic circles, and will introduce our paper in all parts of Europe. Operators on the London and Northwestern Railway, or the Halle Sorau, or the Hanover-Altenbecker Railway, will be as familiar with our doings as are the wide-awake Canadians. We are bound to do all we can in return, and by a generous support of his paper advance our own interests.

Let us hear fully from all sections of the country, and, in addition to enlightening our European brethren, send to Mr. Johnston on every outgoing steamer, as a tribute of our respect, an overflowing budget of interesting news from his cisatlantic home.

◆

Important Notice.

Owing to the great expense in procuring such a great number of illustrations as are presented in "Lightning Flashes," we feel compelled to announce, although reluctantly, that the price to the general public will be $1.75, instead of $1.50. Telegraphers will be allowed a discount of 25 cents on each book, so that the price to them will remain at the same figure, $1.50. This really excellent work is proving a decided "hit," in fact, a succession of hits, for every story is a hit in itself, and the large book publishing houses are taking them off our hands very rapidly, for sale to the general public.

◆

AMONG the many men who are working out electrical problems, and contributing generally to the fund of electrical knowledge, is Mr. Thomas Henning, chief operator in the Western Union office at Buffalo. The writer of this paragraph has often been surprised to learn of the existence of skillful and industrious men in various large offices of whom nothing is ever heard, but who are really the men who furnish brains for those who *are* known; but in no case has he ever heard of a man of Mr. Henning's splendid abilities being so totally ignored. It would scarcely be believed that there are men who, actuated by hate for an excellence they can not reach, would circulate a story that Mr. Henning had become insane from studying the quadruplex. But this has been done, and the primary object of this paragraph is to brand that statement as false in every respect. Mr. Henning is, in fact, one of the sanest, as well as one of the most intelligent and clear-headed electricians we have, and in due time it is to be hoped that he will receive recognition as such.

Western Union Dividend.

The quarterly report of the Western Union Telegraph Company for the quarter ending June 30th was issued on the 13th inst. It says: The net profits for the current quarter ending June 30th inst., based upon official returns for April, nearly complete returns for May, and estimating the business of June, will be about $650,317.52; add surplus April 1, $128,577.10; total, $778,894.62; from which appropriating one quarter's interest on bonded debt, $113,000.00, one quarter's proportion of sinking fund, $20,000.00; total, $133,000.00; leaves a balance of $645.894.62. A dividend of 1½ per cent on the capital stock outstanding requires $507,213.00; deducting which leaves a surplus of $138,681.62.

In view of the preceding, the committee recommend the adoption by the Board of the following:

Resolved, That a dividend of 1½ per centum from the net earnings of the three months ending June 30th be and is hereby declared payable on the 14th day of July next to stockholders of record at the close of business on the 20th day of June inst.

Presentation to a Popular Chief.

DOMN. TEL., TORONTO, May 10th, 1877.

Mr. S. E. Gibbs, for a long time chief operator of this office, a few days ago returned from a short tour with his blooming bride. This occasion was taken advantage of by the operators to show the regard in which he was held by them, and he was presented with a beautifully illuminated address, the work of Mr. F. C. Achertson, of this office, accompanied by an exquisite silver ice pitcher, salver and goblets. The salver bore the inscription:

Presented to
S. E. GIBBS ESQ.,
By the operators of the Dominion Tel. Co.,
Toronto, April, 1877.

The pitcher and goblets were elegantly chased, and had the initials of the happy couple engraved in a neat monogram on each.

The presentation was made in the office, after which the company adjourned to the "Ocean" where mine host Martin had prepared for the refreshment of the inner man. Mr. W. H. Strattan, assistant chief operator, filled the chair with his usual grace and affability. The usual toasts were proposed and drank heartily, the toast of the evening bringing Mr. Gibbs to his feet, when he, in a short speech, returned his thanks for the interest taken in his bride and himself. The party broke up at an early hour, after singing the national anthem.

JOHN.

From Dixie.

CHARLOTTE, N. C., BOASTS THE HANDSOMEST MAN IN THE BUSINESS.

TO THE EDITOR OF THE OPERATOR.

Charlotte, N. C., boasts of having the handsomest electrical representatives that handle the fluid. Our "shop over the way," is creditably represented by Mr. R. E. Duke, as Manager, and Messrs. Dodge and Watkins as Operators. The handsomest man in the business who so successfully represents the craft to the fair sex is Mr. J. J. Royal, of the C. C. R. R. At the A. & C. Depot, Mr. Joe A. Baldwin wafts the fluid day and night. At the R. & D. Depot, Mr. J. F. Blair does the electrical manipulation. At the junction of the R. & D., and A. & C., roads, Mr. J. L. Scales is ensconced amidst the brightness of pretty girls and flowers. He runs a Telegraphers stopping-place, which is widely patronized by the tramping fraternity.

CHARLOTTE, N. C., May 25th, 1877.

[We think the handsomest man in the business should, when properly attested and authenticated, have his picture published. But the vote should be cast by the ladies.—ED.]

OUR DEAD.

On the 30th ult., at Trenton, N. J., Jesse R. Mills, of the Philadelphia Western Union force, passed peacefully to his last rest.

Although the late Mr. Mills was widely known and universally respected, we never could have anticipated such a generous and spontaneous outburst of sympathy as was evoked by his unexpected decease. Forty-three of the employés of the two great telegraph companies in Philadelphia, headed by Manager Robinson, were present at his funeral on Sunday, June 3d, the Pennsylvania Railroad furnishing a special car for their transportation. The floral tributes from Philadelphia consisted of a wreath, a harp, and an anchor, all formed of the most magnificent and costly flowers that could be procured. The operators of Trenton also contributed a superb boquet and an offering of a cross, in exquisite flowers. The pallbearers were: Heber C. Robinson, manager, Philadelphia Western Union office; William G. Jones, H. A. Wells, and W. N. Gove, of the Associated Press, and Charles Moore and William H. Dillon, of the Western Union service.

Mr. Mills leaves a young widow and two lovely children, aged respectively five and two years.

Mr. E. L. Cuthbert, well known throughout the Western States, died at the Presbyterian Hospital, Philadelphia, on the 19th ult., of hip disease. He went to Philadelphia broken in health, and almost a total stranger, and, despite the kindly attention and substantial help of the telegraphers there, he died. He worked for the Western Union Company at Dubuque, Ia., Chicago, and Parker's Landing, Pa., resigning the latter position on account of his failing health. He was a good operator, and an exemplary young man.

It is a startling reflection, but a peculiar and terrific one, and a theme on which every man should dwell soberly, that Mr. Mills, just before his death, but apparently in good health, was most active in soliciting subscriptions to relieve the needs of Mr. Cuthbert, who was then visibly fading away. Within ten days after the death of Mr. Cuthbert, Mr. Mills was stricken down, and our bereavement reminds us that not only the *sickly* die early, but that often "the flower in ripened bloom unmatched must fall the earliest prey." To-day we gaze proudly upon our dearest friend blooming in all the confidence of budding manhood, and marvel at his clearness of head, and strength and symmetry of limb; to-morrow we may lay garlands upon his coffin. In these reflections, the whirlwind of an earthly tempest seems, in its mad fury, to dispel for a moment the mist which envelops the dim Future, and we catch a momentary glance of a strange gleam of light "not born of the sun."

Election of Telegraph Officers.

At the annual meeting of the stockholders of the Franklin Telegraph Company, held at Boston, June 6th., the following directors were chosen for the ensuing year — Sidney Dillon, Jay Gould, W. J. Syms, John H. Mortimer, Thomas T. Eckert, Henry M. Tabor, Frederick Ames, Edwin F. Atkins and James B. Keene. James G. Harris was re-elected Clerk, and Albert B. Chandler, Treasurer

Themes for the Thoughtful.

A generous mind, when it grants a favor, will do it with a grace.

The true evidence that a man loves God is found in his love for man. God is man.

How many think to atone for the evil they have done by the good they intend to do, and are only virtuous in the prospective!

Praise is a debt we owe to the virtues of others, and due unto our own from all whom malice hath not made mute or envy struck dumb.

All the literary history of the world proves that the noblest and most beneficial sentiments can be uttered by the basest and most selfish of human beings.

We must never undervalue any person. The workman loves not that his work should be despised in his presence. Now God is present everywhere, and every person is His work.

All arts which have a tendency to raise man in the scale of being have a certain common bond of union, and are connected, if I may be allowed to say so, by blood relationship with one another.

The dullness of most intercourse between different classes is especially due to the suppression of nature on both sides. The moment that a man shows his real self, the fog of dullness disperses.

When we meet with better fare than was expected the disappointment is overlooked even by the scrupulous. When we meet with worse than was expected, philosophers alone know how to make it better.

Human reason, after guessing and roaming from sect to sect, yearns for a Lord and Master, not to crush it down, but to take it up, weak, bewildered and weary, and fold it in that divine reason whence it borrows vigor and illumination.

Life is short; while we speak it flies; enjoy, then, the present, and forget the future; such is the moral of ancient poetry, a graceful and a wise moral, indulged beneath a southern sky and deserving the phrase applied to it, "The philosophy of the garden.

The horses which make the most show are, in general, those which advance the least. It is the same with men; and we ought not confound that perpetual agitation which exhausts itself in vain efforts with the activity which goes right to the end.

There is something praiseworthy in the employment of those legitimate means of everybody's disposal to earn a reputation of some sort; but to follow the dictates of a low vanity to the attainment of such an end is incompatible with the finest feelings and susceptibilities of our nature.

Spare moments are the gold dust of time; and Young was writing a true as well as a striking line when he taught that "Sands make the mountain and moments make the year." Of all the portions of our life, spare moments are the most fruitful in good or evil. They are the gaps through which temptations find the easiest access to the garden of the soul.

There is no trouble congenial companionship cannot soften, no joy it cannot increase. The poorest dwelling, the most meagre fare, shared with people whose thoughts are one's own, who catch one's meaning at once, and enjoy the same things, is better than all the luxuries the world can give shared by those who are delighted by what bores us, and when we are delighted are manifestly bored.

That which especially distinguishes a high order of man from a low order of man, that which constitutes human goodness, human nobleness, is surely not the degree of enlightenment with which men pursue their own advantage, but it is self-forgetfulness, it is self-sacrifice, it is the disregard of personal pleasure, personal indulgence, personal advantage, remote or present, because some other line of conduct is more right.

The heart of man seeks for sympathy, and each of us craves a recognition of his talents and his labors; but this craving is in danger of becoming morbid unless it be constantly kept in check by calm reflection on its vanity or by dwelling upon the very different and far higher motives which ought to actuate us. That man has fallen into a pitiable state of moral weakness in whose eyes the good opinion of his fellow men is a test of merit, and their applause the principal reward for exertion.

A Good Word for the Operator from a Good Authority.

To the Editor of The Operator.

It must be a subject of pride and congratulation to every telegrapher, that such a useful and interesting journal as The Operator has proved itself to be, should emanate from, and exist solely by, the literary contributions of members of their own profession, neither seeking nor desiring any outside aid whatever. This fact shows convincingly what the telegraphic "fraternity" is capable of in the way of literary attainments, and in this respect they are as fully competent in disseminating literature, as ably and as creditably, as any other profession in existence. That such a numerous body of men engaged in a profession justly esteemed "a necessity of the age," numbering its members by thousands, extendtending over the length and breadth of the land, from the Atlantic to the Pacific, and from the St. Lawrence to the Gulf of Mexico, should require and possess a journal, devoted entirely to their interests and profession, such as The Operator has proved itself to be, cannot for one moment be doubted, and the name and the fame it has achieved in the midst of journalistic_enterprises, manifest to all the abilities of its management, and the almost universal support given to it by telegraphers in general, and thus giving convincing proofs to the world that they at least can be patrons of literature, if not authors, or writers of it. The wide circulation it has attained shows clearly how much it is appreciated, and proud we ought to feel in the possession of such a journal, worthy in every respect to stand "second to none," in the "Press" literature of the country.

To 'every telegrapher The Operator is an invaluable fund of instruction, morality, interest, and amusement—being highly moral in its tone and bearings, giving offence to none, even the most fastidious,—instructive throughout and in every way, and *latterly* publishing that which is so instructive and important for every telegraph operator to become familiar with—I allude to the scientific department—it is also instructive, interesting, and amusing in its inexhaustible *repertoire* of narratives, anecdotes, etc., many of which are so descriptive of characters unique and eccentric that so forcibly convey to the mind how far poor human nature may distort itself, and point out to us those errors which ultimately resulted in their becoming "outcasts" of society. Then we have that useful and necessary information of appointments, resignations, changes, etc, and all the general information that transpires in the telegraphic world; all these have combined to make The Operator an "institute" in the profession, the want of which would be keenly felt by all—in fact would be an irretrievable loss. No one who has had the good fortune of being the reader of your admirable journal but must know how much more beneficial it is, mentally and physically, in perusing its contents, than in spending hours in billiard saloons or in idle and profitless conversation. There is no telegrapher who takes an interest in his business but who should become a subscriber to a journal which is the only mouth-piece of the telegraphic profession—its *only* representative in the "press" of the country, a journal that has proved itself capable of giving publicity to matters pertaining to telegraphy with credit and ability, promulgating to all, that in the encouragement and diffusion of literature, telegraphers can sustain a prominent position in society.

The gentlemen who have contributed to make The Operator what it is, and what it ought to be —a success—are deserving of the highest praise for their meritorious and untiring efforts in the cause of literature, and of placing before the world the members of the telegraphic profession in the proud position they are so well qualified to occupy, not only as exponents of literature, but as patrons of it, and of a class of literature so very dissimilar to all other kinds, that none but those who are "professors of the mystic art," could so ably describe its "mystic rites." The Operator has achieved its fame and success by the literary ability and exertions of gentlemen engaged in their professional duties, who have sacrificed their hours of recreation, for the benefit and improvement of their professional brethren, and without any other prospect of reward, pecuniary or otherwise, and whilst they could only be considered as amateurs of literary art, yet their productions have been and are such, as to entitle them to rank as professionals of the highest order, even of those who are in the receipt of commensurate and handsome salaries. Every telegrapher should and must feel pride and pleasure in being members of a "fraternity" capable of producing men of such distinction, and must consider himself *personally* interested in it. We possess not merely one or two individual cases, but a host—a galaxy of them—men such as "John Oakum," capable of delineating characters that excite our surprise, and often our risibility at the eccentric habits of those "wild rovers," those telegraphic "Arabs," of "days long gone by," and by the diversity of his style can carry out sympathies to beauty and pathos, men, like "Werner," who by his genius, his energy, his vigor might almost be termed classic, and who seems by every word of a sentence to force your conviction to his argument—men who, like "Oney Gagin," "Ruddy," "Sampson," "Yosef," etc., have won fame as writers, and have proved to the world that they are as capable of "handling the pen," as they are of "handling the key." Such men are, and will remain, the glory of the telegraphic profession. In other days—days to come, when telegraphy may be more than it is now, for all acknowledge that as yet it is only in its infancy—telegraphic literature may assume a greater and wider sphere, and the then generation of telegraphers may point back to our present literary champions, and speak of them as the founders, the pioneers, the fathers of telegraphic literature, and hold them in reverence, next to the founder, the father of Telegraphy itself—the immortal Morse.

Apologizing, Mr. Editor, in occupying too much space in your valuable journal, I may say that a sense of justice impelled me to do so in rendering "honor to those to whom honor is due."

Yours sincerely, Justus.

Philadelphia, May 5, 1877.

* * *

Dashes Here and There.

Burling Islip, N. Y., is good; but Burling Slip, N. Y., is better.

The London *Mining Journal* advocates the use of telephones in mines.

"It's never too late to mend." That is why some operators "break" so much.

The words "notify St. Lawrence," were recently changed to "notify Alla Wrence."

Can any one instruct a forlorn Kansas chief operator how to commit suicide by telegraph?

A Chicago man wants to commit suicide by telegraph, but doesn't know how to accomplish it.

Eitemiller lives upon his reputation as the fastest telegrapher in the world. He is getting very thin.

The Telephone would prove of capital service during the hot summer months. It could be employed in bringing airs from the Arctic regions.—*Philadelphia Bulletin.*

At North Hadley, Mass., June 6th, Horatio C. Hurd, a prominent citizen, was struck by lightning and instantly killed. At Fitchburg several buildings were damaged by lightning on the same day.

The London *Mining Journal* advocates the use of telphones in mines. Should an accident occur the prompt notification of it and its nature to those at the surface might save many lives and much property.

Prof. Bell estimates that when he gets the telephone perfected as he contemplates, it can be made so effective in the case of a fire as not to require the populace to get up out of bed and holler.—*Danbury News.*

The telephone was on exhibition at Pittsfield, Westfield, and Springfield, Mass., Saturday, May 12th, over the Western Union line. At Westfield an organ, clarionet, and voices were used with good success.

Well, that's rich! The words "Miss Hollonquist" were recently transformed by an intelligent South Carolina artist into, "Miss will hold an inquest!" The superintendent should hold one over a departed would-be telegrapher.

During the latter part of last month, a sudden mortality overtook the fish in Park River, Hartford, and the floating remains actually created a nuisance. The mystery has been solved. One hundred electric battery jars had been washed into the river.

Mr. Peter Cooper evidently inflates his air cushion with gas. According to his speech as reported in the New York *World*, the Cooper Institute plug factory graduated 2,500 operators in two and a half years, all of whom found employment with the Western Union Company. This is at the rate of three graduates per day. It is to be hoped that Mr. Edison will not quadruplex the system.

The Associated Press of this State last week elected the following officers for the ensuing year: President, J. C. Cuyler, Albany; Secretary and Treasurer, Henry O. R. Tucker, Troy; Executive Committee, William Purcell, Rochester; C. G. Fairman, Elmira; C. W. McCune, Buffalo; Carroll E. Smith, Syracuse, and M. Parker Williams, Hudson.

The Guadalupe *Telegraph* remarks that Miss Sallie Whaley has been discharged from the Western Union office at that place, because "the picayunish company" grudge the few dollars necessary to hire a man to climb poles. Whereat the California *Spirit of the Times* queries: "Why could not Miss Sallie do that?"

The Western Union Telegraph Company are about to lay a cable across the Great South Bay, connecting Fire Island with New York by way of the wire along the Southern Railroad. The cable will extend from Sumpuram's Point to Oak Island, thence to the Surf Hotel overland, crossing the channels and inlet. There will be a signal station at the Surf Hotel, in charge of Theodore Bishop.

Captain Murphy, of the schooner Centennial, reports at Gloucester, Mass., fishing up with his anchor, off the northeast corner of St. Pierre Bank, one of the telegraph cable wires of the Anglo-American Cable Co. He was obliged to cut his cable, and lost seventy-five fathoms of the chain and the anchor in order to clear his vessel and save the telegraph cable from injury.

Albany, N. Y., May 28, 11.30 p. m.—There was one of the most extensive displays of aurora borealis here to-night ever seen in this section. The atmosphere was so strongly impregnated with electricity that communication was kept up for some time with New York, Boston and Montreal over the Western Union Telegraph wires without the use of a battery. This dispatch is so transmitted.

As the masts of the Boston Tea Ship passed between the telegraph poles at Thirteenth Street and Fifth Avenue, during the Carnival procession on May 15th, they caught in the wires, and both poles snapped, tottered, and then fell on top of an express wagon. Men and women screamed and rolled and fell upon each other until the 'procession was stopped to allow them to run through the lines.

When an operator learns to put seven dots in an "8," and eleven dots in the figure "6," he becomes eminently qualified for a position as reporter in the New York Stock Exchange. A register is kept in circuit in the Gold and Stock Operating room, so that the record will not be lost, in case the receiver steps out to "see a man," while a "6" is *en route.*

It does the average operator's heart good to see the manager go home at 4 p. m., leaving his keys dangling in his private drawer. A tolerably good, first-class man can go through that drawer in three minutes, and as he comes across a fifty-dollar-error envelope, and finds that it is against himself, he glances furtively around, shoves it down in his inside pocket, and, heaving a deep sigh, goes back to his wire to meditate in solemn silence on the uncertainty of life.

During a severe hail and thunder storm last week, at Hyde Park, a ball of fire ran along the telegraph wire, and entered the operator's room in the New York and New England railroad depot. It melted the connecting wire and damaged the instrument so badly as to render it useless. Miss Josephine P. Folsom, the operator, was near the instrument, but escaped injury, though much alarmed. Charles Gerry, a private operator, sustained a severe shock while at work at his instrument.

During the storm of June 6th, the lightning followed the telegraph wires into the office of Thomas Haines, superintendent of the Hestonville Railway Company, West Philadelphia, Penn., and prostrated that gentleman. The superintendent was not much hurt, although the thunderbolt took him unawares and right square on the head. He admits that it rather got the best of him, but explains that he had been sick for a month previously, or he would have made a better stand.

A lively and interesting book called "Lightning Flashes" has been issued from the office of The Operator, a semi-monthly journal published in New York in the interest of telegraphing. Mr. G. W. Russell, of New London, is a regular contributor to The Operator, and has furnished for Lightning Flashes a pretty little story called the "Vow of the Six Operators," being a sketch of early telegraph life in this State. It is well told, and being the maiden effort of this gentleman in the story-writing line, deserves very high praise. The book is sprightly throughout, and has some very witty as well as able articles.—*Norwich Bulletin.*

A Cordial Invitation to Eastern Telegraphers.

HOW IS THE WALKING WEST OF CHICAGO?

MR. EDITOR.

Frank Leslie and his staff of reporters and artists have "done" the Pacific coast, having had a good, old-time-jollification, two of the "smarties" having fought, or attempted to fight a duel, for the amusement of the rest of the party. The Nebraska editorial excursion party, are visiting all the prominent places of interest here, and having a good old-fashioned "jamboree." There are several other excursions contemplated, I understand, to the Pacific coast during the summer months. Now, why couldn't our eastern telegraphic brothers put their wits together and plan a nice little western tour, representing the Atlantic States? Wouldn't it be nice to see a lot of jolly operators making a grand western trip? Though it would, undoubtedly, be a great surprise to many! Anyhow, we would be only too glad to have our Eastern friends pay us a brotherly visit. We would heartily extend to them the welcome grasp of true friendship, and proudly show them the great "White Elephant" of our coast, and tender them a warm reception. Come on, brothers, and bring some of the charming sisters with you. We have lots of pretty things to show you. We won't fight any duels either, but will smoke the pipe of peace, and show the world's population that we can afford to have excursion parties and enjoy life as well as the conductors, editors, and other "high-toned" people can. Yes, brothers, come out and see us. We will show you our "Big Bonanza," our gold mines, our "State of solid silver," the noble red chiefs, their "queens" and dusky daughters. The monstrous "Big Trees," the lovely valley of the "Yosemite," with its foaming "Bridal Veil," and many other things of curiosity and nature's art. Lay away the key of brass, and leave your dingy dungeons where nothing is heard but the constant "click, click, click," and rumors of a "sliding scale," and come out here and enjoy a ramble through our lovely gardens and groves, breathe the pure mountain air, listen to the music of our babbling brooks, hear the sweet songs of the merry songsters, enjoy the baths of our beautiful warming sunshine, assist us in eating our delicious strawberries and cream, ripe cherries and peaches, join us in a "pic-nic" where we will burst open ripe watermelons, have an old-fashioned grapevine swing, eat gingerbread and peanuts as we once did in our early boyhood school days. Brace up, my Eastern brothers, and have some style about you! Go down into the lower levels of your big pocket, and bring out that wad of "shin-plasters," and come out and join us in enjoying one of pure nature's holidays. Oney, Nuff Ced, Chops, Ruddy, Werner, start the ball going and we Pacific coasters will assist you in keeping it rolling. We await your "echo."

"COIN."

PALISADE, NEB. May 31st. 1877.

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Echoes from 197.

Tom Kennedy uses snuff.

T. A. Edison is gray as a badger, and rapidly growing old.

Gib. Merrill won four hundred dollars on Ochiltree, at the Jerome Park races last week.

Joe Wood returns from a month's vacation in Connecticut, looking as brown as a nut.

It is stated that Mr. S. Bogart, the rotund chief of the South, has fallen heir to an estate valued at $60,000, in Duluth, Minn.

Mr. P. K. Jones, the handsome and genial Percy, will spend his vacation in the Catskills, with a party of ladies and gentlemen from Rochester.

Mr. W. J. Landy, of the cable department, nights, has been transferred to the day force. Billy is a splendid operator, and a clever gentleman.

Mr. R. H. Morris, Mechanical Engineer of the Company, was sent to Boston, last week, to put up the Sextoplex, now in active operation between New York and the "Hub."

The Western Union messengers were the victims of a reduction of about 14 per cent. on the 1st of June, their rate of pay being reduced one half cent on each message delivered.

The Western Union has opened a very neat office in the Mining Exchange, 60 Broadway, beside the open board of brokers. Quite a business is done, the office working duplex to Boston, as well as with some of the broker offices in Philadelphia. Mr. J. R. Dennis, a well known and efficient operator has charge of the office.

FOR THE BOYS AT 197.—"That maroon colored fakir who used to sub for Pete in the elevator, passed through here yesterday, for Salt Lake City," is the casual observation of an Omaha correspondent.

On dit, that Mr. James Bradt will soon lead to the altar the only daughter of a wealthy family in the City of Churches. The lady in question is young, highly accomplished, and was, last season, the reigning belle of Newport.

A letter received from "Bif" Cook, last week, locates that erratic genius somewheere in the vicinity of the Black Hills. There never existed, perhaps, in the history of this office, a favorite so universal and popular, as he who is familiarly known by the *soubriquet* of "Bif."

Mention having been made in these columns of some fast sending by N. B. Stone of the Atlantic and Pacific office, it is but proper to state that even his exceptionable speed has been fairly discounted by Jules Guthridge, of this office, who, on Friday last, sent a special of 1,427 words to Boston, in the unparalleled time of *thirty one minutes and aquarter*. The press was copied without a break by D. B. Grandy.

It is understood that Dennis Brown is prominently mentioned in connection with a new position about to be created by the company. By his thorough knowledge of the service which he has studied, even to its minutest details, Mr. Brown has outstripped his *confreres*, and won for himself the respect and appreciation of the executive managers, which latter is now, if rumor speaks truly, about to assume some definite and practical shape

During the recent visit of the Russian fleet to these waters, the Grand Dukes, Alexis and Constantine visited the telegraph office and were conducted through the various departments by Mr. L. E. Weller. At the conclusion of their visit, Alexis presented Mr. Weller with a gold snuff box, of a very unique pattern, as a *souvenir* of the occasion. Mr. Weller is justly proud of the honor thus gracefully bestowed, and in deference to his royal friend, has changed his "sign" from We to Ax.

Walter Phillips, in one of his usually graceful sketches, published in THE OPERATOR last fall felicitously describes "Bif's" characteristics in an amusing but singularly truthful manner. Among other anecdotes related of the boy, is the following by Harry Henry, who, by the way, is a strict member of the Presbyterian Church. Stepping into Knox's to pay for a hat which he had ordered reserved for him, "Bif" apologized for his tardiness in not calling sooner, by saying that he had had no time. Reaching the street, Harry turning toward him a surprised face said, in an injured tone, "Oh! Bif, how could you tell that gentleman so base a falsehood?" "How so," returned Bif, doggedly. "Why, you told him you had no time, when in fact you have nothing else but time—time to sell." "You're way off, Jim," quothed the young philosopher, "and I will convince you, if not morally, that I am at least logically correct. There is a maxim old as the everlasting hills, that 'Time is money,' hence it follows, *per contra*, that money is time. Now, if time is money, and money is time, how the d—l could I tell a lie in saying I had no time, *i. e.*, money?" Delivering himself thus profanely, Bif sprang into a passing stage, and leered horridly through the open window at poor Harry, who remained rooted to the spot, and speechless with amazement at this original perversion of a logical (?) proposition.

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Washington Notes.

Messrs. Hotchkiss, Nutt, Fred Marean, and Kelly have commenced their summer vacations this month, and will probably be absent until next fall.

The "laying off" plan is to be discontinued after the 10th inst. This is a "relief" that all will appreciate.

Mr. Ryan, after a two weeks' pedestrian tour, returns in fine condition, and volunteers the information that "Niagara is a nice place." This is news, for we never knew there was such a place in "Swampoodle."

The telegraphers of Washington will give a moonlight excursion on the 20th of June to Marshall Hall, about twenty miles down the Potomac. As the affair is under the management of several of our most energetic men, it promises to be a success in every particular. Operators from Baltimore and from some of the Virginia railroads are expected to attend.

New Books.

Outline of Railway Telegraphy, designed and prepared by J. P. Abernethy. Cleveland: Robison, Savage & Co.

This modest little work, issued in pamphlet form, commends itself to all railroad men, especially to operators. Signals, train orders, the block system of train dispatching, and examples of "train orders" on the different railroads are lucidly explained. Operators who are thoroughly conversant with routine matters on their own roads will be benefited by studying the methods on other roads. They are stated clearly, but, from the size of the pamphlet, briefly.

PERSONALS.

Miss M. Andrews, of the M. T. Co., Montreal, is now at Toronto.

Mr. Walter P. Phillips has gone to Niagara Falls to stay a week or ten days.

Mr. L. G. Tillotson and wife arrived from Europe last week, on the steamer Brittanic.

Mr. Jake Thompson, of the Atlantic and Pacific Telegraph office, Buffalo, has been spending a few weeks in Canada.

Mr. Charles Gray, operator at Bay St. Louis, Miss., was married recently to Miss Ellen Farve. Their friends send many congratulations.

Messrs. R. C. Rattray, Joseph Barley and H. C. Wilson have left the Dominion Telegraph Company, and joined the Atlantic and Pacific at Chicago.

Miss Helen Meignelle left New York, June 4th, to to take charge of the office at Lake Dunmore House, Vermont. She carries with her the best wishes of the fraternity.

Mr. G. E. Carlisle, for many years an operator in Toronto, has left that place for the New York Western Union office. Our Canadian correspondents speak of him in the highest terms.

Mr. L. Campbell, who has successfully "done" New Orleans, St. Louis, Chicago and New York during the past eight months, is now working at the main office of the A. and P. in New York.

Manager Soule and chief operator Griffin, of the Atlantic and Pacific, are getting things into shape, and doing a big business at that company's general office, Third and Chestnut streets, Philadelphia.

George E. Miller, formerly chief operator of the Atlantic and Pacific Telegraph Company, at St. Louis, Mo., has resigned, and accepted a position with the same company at Pioche, Nevada. George is a good fellow, and has the best wishes of his friends in his new field of labor.

Mr. Robert Henry, late of the Gold and Stock Telegraph Company, has assumed charge of the agency of the Western Electric M'f'g Co. at 20 New Church Street, in this city. The business of this branch is principally the sale of Edison's Electric Pen and Duplicating Press, which is rapidly increasing.

D. C. Shaw ("Oney Gagin,") starts June [illegible], for a two weeks fishing excursion to the Adirondacks. He has been practicing for a month past in Mr. Murphy's wash tub [illegible] of the office, with a spool of thread for fishing line and [illegible] for hook, and now considers himself a first class fisherman.

Frank Rae tantalizes his stay at home friends in the East with glowing descriptions of California. San Francisco he describes as an earthly paradise, while the office is, [illegible], a model of telegraphic enjoyment. The reason is obvious: "We keep no number sheets, don't mark off cables, work in our shirt sleeves, and chew tobacco while on duty."

Mrs Mattie Lewis, "M," who has been with the Atlantic and Pacific Telegraph Company at Boston for some years, has resigned her position and gone housekeeping. She is considered the fastest lady operator in the business, Mr. [illegible] of New York office, having once sent her 200 messages in [illegible] minutes, all of which she received without a break, earning for herself the title "Queen of the Profession." She carries with her the best wishes of all her associates.

TRENTON, N. J., PERSONALS.—At the Western Union main office, Mr. F. H. [illegible], manager, J. McCrellish, chief operator, and the Misses [illegible] and Smith, assistants. At the depot, Western Union, Mr. C. H. Ford, at the Pennsylvania Railroad, Messrs. G. H. Oliver and J. R. [illegible] of the day force, and Mr F. H. Avery, nights. Mr. Wright represents the Atlantic and Pacific Company with much credit, and a score of other first class operators, more or less, are distributed in Trenton, always where they will do the most good.

Long Island Personals.—Mr T. E. Korber has been transferred from Creedmoor to Ocean Point Junction, on Long Island Railroad. J. E. Bieber is now stationed at Creedmoor. Miss Annie Schiller is back at her old post at College Point, L. I. Fred Cloudman has left Central Depot, Flushing, L. I., for the vicinity of the Black Hills; Mr. T. Duall is his successor. J. Schoonover has left Bayshore, Long Island Railroad, and is now "out of the business." C. A. L'Hommedieu has been transferred from Corona to Rockville Centre, *vice* W. Ellis, resigned. George Erbelding has been appointed agent and operator at Corona, Long Island Railroad.

Penn. R. R. Personals.—Jersey City: Norris and Mr. Wiseman are the operators at Pullman's depot office; H. C. Ross at General Superintendent's office; Fred T. Bligh at yardmaster's office; Charles Numbers and Joe H. Dunn at Newark Av.; Frank Elliott, W. A. Fenn, W. Tony Swem, and J. W. Collings at Harsimus Trestle; George Baron, formerly of A. and P. at Chicago, and Dennis Collins at East End Bergen Cut; George B. Fairgraves and W. H. Freer at West End Bergen Cut; J. T. Naylor, Jr., and Ed. Ellston at Harsimus Junction.

At the Meadows.—Ed. Terrill and Mason at the station; George R. Byrd at master mechanic's office; —— Sayre and F. W. Spinning at Fish House or west end of yard; John Doyle and P. Plum at yardmaster's office.

Newark.—F. T. Freary at 182 Market Street; H. Miller and Adolphe Fawrenbache at Market Street depot; Joseph McNulty and John Fleigauf at South Broad Street depot; Mr. Chandler and Mr. Bennett at East Newark. P's and Q's.

Philadelphia Personals.—Mr. Bloomhoff has been appointed on the night force, *vice* Jesse R. Mills, deceased. Mr. Black, upon the return of Mr. Zeublin, has rejoined the night force. Mr. Charles Monro has gone to Cape May for the summer, and has been succeeded on the night force by Mr. E. G. Haight. Mr. W. H. Dillon has been transferred, at his own request, from night to day duty, and Mr. Herman Schussler takes Mr. Dillon's chair. Mr. W. H. Tibbetts, of Grafton, Va., has taken the vacancy on the day force caused by the resignation of Mr. Griffin. Mr. Minor Gross has gone over to the Atlantic and Pacific, and his place at the Continental Hotel has been filled by the appointment of Mr. R. M. Swann, of Princeton, N. J. Mr. Shrigley has been promoted to the position made vacant by Albert Abrams, who has joined the Atlantic and Pacific. A new feature of this office is the employment of lady operators. Miss Deisher, from away down South, and the good natured Miss Mary H. McLaughlin have been added to the day force, and both give general satisfaction. All a man need do, if he wants an involuntary vacation, is to address one of them during business hours. One man has already had this experience.

MARRIAGES.

Duffie—Coleman.—At the residence of the bride's parents, Kalamazoo, Mich., May 29, 1877, by Rev. Frank Russell, Charles T. Duffie to Miss Kittie M. Coleman, both of Kalamazoo.

Charlie is an old operator on the M. C. R. R., and is at present located at Ypsilanti. His many friends and acquaintances wish him and his bride a long life of joy and happiness.

Ross—Jackson.—At the residence of the bride's parents, Osage City, Kansas, May 21st, 1877, Mr. W. J. Ross, operator at the General Office, A. T. and S. F. R. R., Topeka, Kansas, to Miss Mary C. Jackson.

Crissy—Buck.—At Henry, Ills., Thursday, May 24th, 1877, by Rev. B. Edmiston, Sidney R. Crissy, operator and ticket agent, M. C. R. R., Delhi Mills, Mich., to Miss Jessie E. Buck, of Henry, Ills.

DEATHS.

Thursday, May 30th, 1877, at Trenton, N. J., Jesse R. Mills, of typhoid fever. Aged 29 years.

May 19th, 1877, at the Presbyterian Hospital, West Philadelphia, Pa., E. L. Cuthbert, late of the Western Union Telegraph Company.

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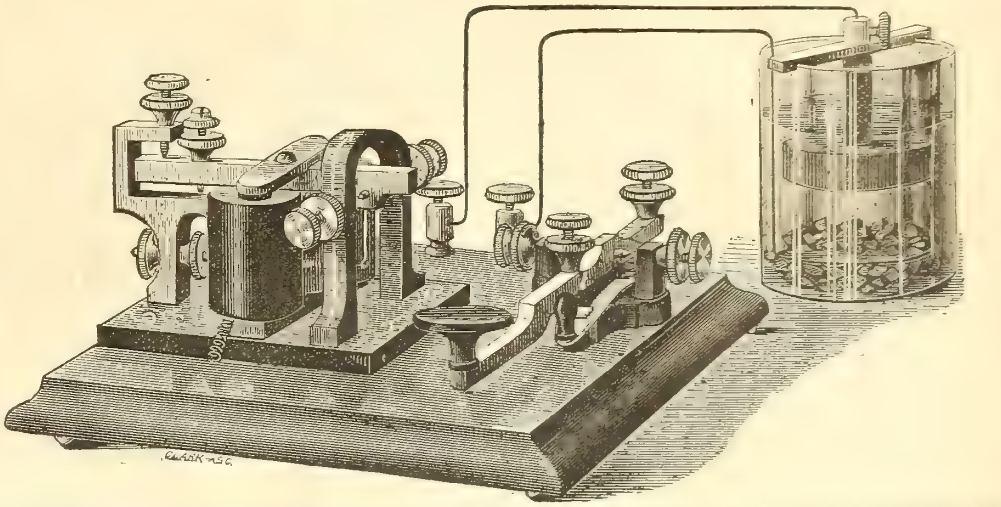

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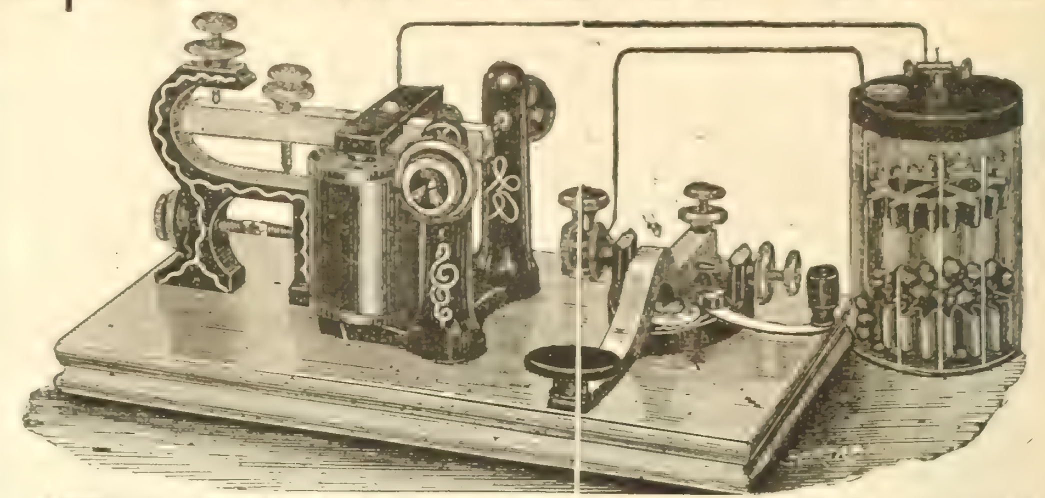

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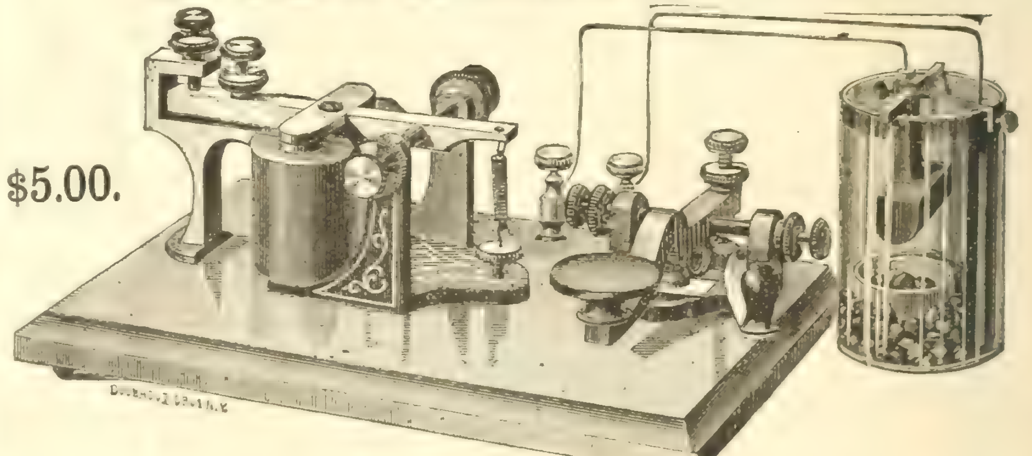

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VOL. VII. NEW YORK, JULY 1, 1877. No. 9

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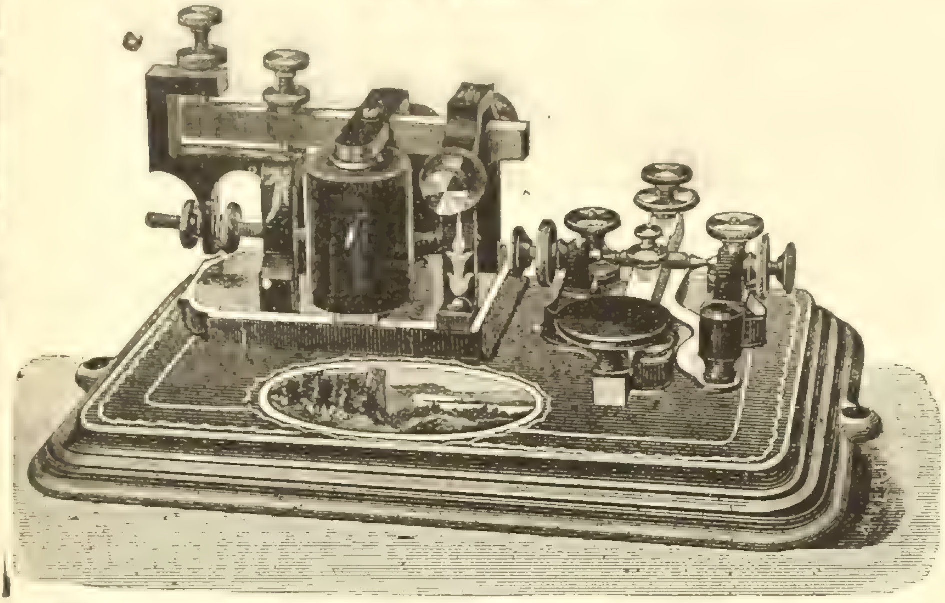

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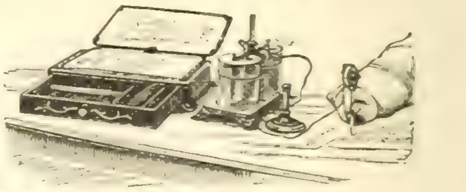

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THE
OPERATOR,
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July 1st, 1877.

Volume VII. **Whole No. 81.**

"Over the Wires."

I watched him at his work—
The messages came and went—
And he seemed to care but little or naught,
For what he received and sent.

He copied words of love—
He hurried them on their way—
And tidings of death were just the same,
If they met with no delay.

The wires were never done—
Love and sorrow and gold—
And the man-machine, though he heeded not,
Heard many a secret told.

There came a change one day,
The man-machine grew pale;
For the wires had spoken *to him* at last,
And they told a mournful tale.

I read it where it lay—
The woman he loved was dead—
And with all the rest, and just as brief,
His message of grief had sped.

W. J. LEADER.

Barney Martin.

BY JOHN OAKUM.

He who defined genius as prolonged patience was nearer right, perhaps, than many who fancy that they possess that boon are ready to admit. With Barney, at all events, prolonged patience has accomplished marvels—miracles, I sometimes think. His ruddy face and big brogans attracted my attention one day, and on inquiry I learned that he was a new addition to the messenger force. As a brother messenger, a broad-faced urchin, expressed it, Barney was "as Irish as Pat Murphy's pig." Without being at all familiar with the probable, not to say the precise, degree of Celtic character obtaining in the nature of Mr. Murphy's porcine, I readily believed what I had heard, for Barney was certainly one of the most thorough-going sons of Erin that I had ever seen. We found him a very faithful boy, with a tolerable turn for grumbling when his route was a long one, while for a pure article of unadulterated profanity, when harrassed by his companions of the messengers' bench, he was without a peer. I once told him that he was born too late, that he would have been a valuable acquisition to "our army in Flanders," but he merely regarded me with a stony look, for a second, and went on reading the Beadle's Dime Novel, from which I had momentarily diverted his attention.

Without having enjoyed unusual school facilities, and possessed of no decided tendency to study now that he was free from pedagogical restraint and incentives, it soon transpired, nevertheless, that Barney was not without aspirations. At the end of a year he had grown tremendously, and in reply to an inquiry as to what he intended to do when he was too big to carry messages, he said:

"I am next oldest boy on the messenger list, and when I am the oldest wan and a clerk leaves I am going to try for it."

The idea of Barney ever becoming a clerk was absurd, and his interrogator laughed and left the boy to his dreams. Barney made no secret of his designs on a clerkship, and after awhile it became a common thing for the operators to say that they would probably get their salaries raised about the time that Barney got his clerkship. Meantime the months ran by, and Barney was the oldest messenger at last. Finally the night clerk resigned to engage in other, and, I trust, more lucrative, business, and Barney came to the front with a personal application for the position. Our manager told him—told him rather savagely—to go and sit down, and Barney obeyed with an air such as the youthful Disraeli assumed, I fancy, when he roared back at his jeering colleagues in Parliament that memorable speech: "I am not at all surprised at the reception I have experienced. I have begun several times many things, and I have often succeeded at last. I will sit down now, but the time will come when you will listen to me."

In time the night clerkship was again vacant, and Barney waited on the manager. Again he was rebuffed more decidedly than before, and again he took his seat not a whit discouraged. I recall him to mind as he was in those days—zealous, but righteously indignant, whenever he was sent off on a long journey. He had a fashion of puffing out his cheeks when things went wrong, and his face was a barometer by which we all knew, as he came swinging across the operating room, on his way from the delivery desk to the rear exit, how matters fared with him. When the route was short he was as pleasant-visaged perhaps as Aminidab Sleek, but not more so; when it was medium, he began to swell about half way down the room, and reserved his blessings on the head of the delivery clerk until he reached the door; but when he had what the boys called "a swinjer," his appearance presaged apoplexy from the first, and he indulged, while yet in the operating room, in observations which, like the single sentence of invective by Mr. Harte's Vulgar Little Boy, conveyed a reflection on the legitimacy of the offending clerk's birth, hinted a suspicion of his father's integrity, impugned the fair fame of his mother, and cast a doubt on the likelihood of his eventual salvation.

Time after time Barney applied for a clerkship, and one day he was met with the inquiry from the manager:

"What can *you* do? You are irrepressible, Barney. I am tired of sending you to your seat."

"I think, sur," returned Barney, "that I can do as good as 'the Count' (the retiring clerk), anyhow, and you never give me a chance at all to try. I only want a chance."

The upshot of this dialogue, which is unpardonably abridged, was, that Barney succeeded "the Count." He appeared on the evening of his succession to the night clerkship in a white shirt and a collar—a new departure for him. "The ould woman," he explained, "put these things out, and said I must wear them." Barney believed in his mother and obeyed her, I remember, much better than many youths who made greater pretensions than he did. He adhered to his hob-nailed shoes for several months, but one day they gave place to "Oxford ties," a cravat followed, and so little by little the rough boy was transformed into quite a tidy young man. As I have said, Barney had not enjoyed unusual educational advantages, and he was particularly uncertain in his geography, so, when a message was tendered for Calais without the State being given, he failed to find that station in the tariff book. Rather than ask the sender for information he came slyly over to me, and inquired in a hoarse whisper, "In that State is Kay-lye-us?" I looked at the message in his hand, corrected him on his pronunciation, and replied that Calais was in Maine. Barney learned two things that night, that Calais was not pronounced Kay-lye-us, and that it was in Maine. It was one of his peculiarities that he never forgot what he had once learned. He asked me many queer questions, during subsequent years of pleasant business relations, but he was clear on Calais for all time both as regarded its pronunciation and locality.

One evening a lady, much agitated, called to send a telegram, and Barney was requested to write it. When I took the message from the book to send it, I was struck by the phraseology and the conflicting circumstance that it was evidently from an American, it being signed, "Mrs. Mason." It read, "Your brother Jim lies at the point of death. Come quick, if you would see him living."

"Who got up this remarkable message, Barney?" I inquired.

"I did, sur," he replied, blushing. He had come to know me pretty well, and had found that I was rather plain spoken.

"It is horribly expressed for a Yankee's message," I continued, "Regular Irish. We had better write it over."

Barney intimated that he had never discovered any noticeable difference between an Irishman's message and an American's. He said he had done the best he could with it. He thought it would be understood by the recipients, and he supposed that was enough. I felt sorry that I had been rude, and replied that I had spoken hastily, that as a matter of fact, as he well knew, no man had a higher opinion of the sturdy sons of Erin than I. I then went on to speak of what Goldsmith, Sheridan, Curran, Moore, and a host of others had done for English literature, and essayed to give him some ideas about the faculty of expression, and endeavored to disabuse his mind of the notion that to make one's self understood is not necessarily the highest and most valuable use to which language could be put. He listened attentively, and subsequent events proved that my crude lecture on the art of writing gracefully was not lost on him. We indited a new message, reading thus: "Your brother James is dangerously ill. It will be necessary for you to come immediately if you wish to see him alive."

Walking home together after "good night," Barney observed after a long silence, that there was "wan thing about that improved stoile of writing messages that wasn't as good as an Irishman's way."

"No?" I replied. "And, pray, what is that?"

"That message I wrote," he answered, "had seventeen worruds. The tariff is forty and three. I tuck sixty-wan cents on it, and the way you fixed it over it made twenty-two worruds, and came to seventy-three cents. I am twelve cents short on it, and I'll have to borrow twelve cents of the ould man to square up my account with to-morrow night."

It was a home thrust, but he made his poini against me without a grain of malice, for he saw it not, and I did not enlighten him. But I went home thinking that there were two sides to every story.

Time went on, and Barney had become an excellent clerk, but his ambition grew apace, and one day he turned his attention to the Morse alphabet. O! then began the terror to my soul. I stood it for about six months, but one evening when I had listened to his sending for half an hour without catching the first sound that resembled a Morse character, I went over to him and said:

"Barney, I am afraid you will never make an operator. I have heard a great deal of your sending, and I have never yet been able to distinguish a letter, to say nothing of a whole word."

He looked aghast, and I continued:

"Operators are like poets, they are born, not made; and I am afraid you are the counterpart of the young man of whom our friend Jack Selden tells, who, after practicing a year, would make a series of dashes and a whirlwind of dots and blandly inquire, 'How is that for an A?'"

"I was timing myself, and I sent half a column out of the *Journal* in an hour. I *thought* it was good Morse," he said, dolefully.

"I dont' want to discourage you, Barney," I returned. "Indeed, you know very well that a good many boys who are now fine operators learned the business under my tuition, but the fact is you make no progress whatever. Warner says that there are people in great numbers who try to reach high C, but the most of them, finding that high C is not for them, go down in the chorus. Only those who have a soft spot in their head go on straining through a lifetime to reach high C. I hope you will stick to clerking, and leave this branch of the business to others who are better adapted to its requirements.

Barney replied, construing me literally, that he "didn't give a damn for high C," and added: "I suppose I'll have to begin all over again." I saw that he was determined to succeed, and so advised him to begin at the beginning and proceed slowly. He thought some one ought to have corrected him. "When John was working for you wan night," Barney went on, "he said I had a hand like a ham, but he didn't tell me I was all wrong. I've got to learn it anyhow," he concluded, as he lighted a black clay pipe and went out and turned down the gas in the customers' department.

"I suppose I'll have to begin all over again" was characteristic of Barney Martin. In his modest lexicon there was no such word as fail, and I [illegible] and helped him from that time on. The gods help those who help themselves, so after all I had but little to do. Barney had much to overcome. He had learned to write a style of Morse that was as Greek to skilled operators, and his handwriting was unformed and fearfully suggestive of a nightmare. Now mark what tenacity and persistence will do. If genius is not prolonged patience, is it not a substitute for it, which we cannot well [illegible]. Two years after the discouraging interview, Barney was not only one of the finest senders I ever heard, but one of the most finished receivers as well. And as he perfected himself in his business his whole character changed also. He no longer says "your brother Jim at the point of death," but expresses himself in good sound English, and he is the model of a clerk [illegible] chirography. He is prominently connected with the church, and is, I doubt not, teaching urchins such as he was a few years ago how to walk around some of the obstacles in the path to glory over which he himself has been forced to climb. And as I bring this desultory paper to a close, a rumor reaches me that his honest heart has been pierced by Cupid's arrow, and that he will ere long join the great army of Benedicts. Six years ago I should scarcely have felt like congratulating the lady, but all is changed now, and I feel certain she will find in Barney a worthy husband. And if she cares as much for him as I do, their lives should flow on as peacefully as "the rivers which water the [illegible]."

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Letters from Europe.

A PLEASANT OCEAN VOYAGE AND AN EXASPERATING BREAKDOWN.—BEATING A RIVAL VESSEL IN A FAIR RACE, AND THEN PAYING HER $25,000 TO TOW THE VICTORS INTO PORT.—THE CORK TELEGRAPH OFFICES — SALARIES PAID. THE DUPLEX IN IRELAND.

It was very pleasant on the morning that we started. After the Berlin had swung majestically out into the stream, to the strains of "The Star Spangled Banner," "Yankee Doodle," and other lively airs from a brass band on the dock, we had a delightful sail through the narrows, down the bay, and out on the ocean. We passed Sandy Hook at 11.08, and caught the last glimpse of American soil at 11.30. The weather was of a most enjoyable character, and the sea as smooth as glass.

About two o'clock next morning it became quite foggy, and what sailors call "dirty" weather. The fog whistle began to clear its throat and prepare for action. This continued all day, the weather only clearing slightly at intervals. Monday was partially foggy also, though at times very pleasant and enjoyable. The weather so far, outside of the fog, was simply splendid, and the sea as calm as a pond. Were it not for the fog, the trip so far would have been perfectly delightful. Tuesday was damp, raining and disagreeable most of the time, though the sea was still calm. That abominable fog whistle commenced again about nine, the weather becoming once more "as thick as a hedge," to use the sailors' expression. About ten o'clock on Wednesday we passed the National Line steamer Egypt, and White Star steamer Britannic, both bound West. Mr. L. G. Tillotson and his wife were passengers in the latter, but I didn't have a chance to salute them. The sea was just a trifle rougher today, and the weather perceptibly colder, but still very pleasant. Fog all cleared away.

Everything went along beautifully until about 8.45 on Friday evening, when a peculiar rasping, scraping sensation was felt. The vessel shook and trembled violently from stem to stern in a most unpleasant and uncomfortable fashion. The general opinion was that she had either struck a rock, was dragging her weary length over a sunken wreck, or had suddenly parted in two. Either of these was so vividly suggestive of "Davy Jones' locker," and the near probability of sleeping the long dreamless sleep beneath the coral and sea weed, under the raging billow, that it required but a very few seconds to create an amateur panic. Several minutes of awful suspense followed, which seemed as ages, women screaming and fainting, and everybody excitedly—almost despairingly—asking his neighbor, "What is the matter?" "Are we going down?" It was subsequently ascertained that "the finest passenger steamer afloat," like her sister ship the City of Brussels, had broken her shaft, and must now proceed as best she could under sail.

But as a sailer the Berlin is not a success. The propeller impeded her so much that she could not make even enough progress to answer her rudder. We were, therefore, compelled to lie in the trough of the sea, Micawber like, awaiting something to turn up, and at the mercy of any storm that might come along. An ocean voyage at best is monotonous, but when it comes to aimless drifting, with a possibility of floating off the regular track of other steamers, and possibly not seeing land for months, certainly not for weeks, it takes considerable philosophy to smile and feel contented and happy. Next day, Saturday, there was no wind at all, so we just lay there enjoying a sun bath. About three o'clock we sent a boat to hail a passing bark bound west, in case she met a steamer coming our way, to give her our compliments, and tell her we should be pleased to have her call. Then we resumed the sun bath, and kept drifting south, singing sadly and sarcastically:

> A life on the ocean wave,
> A home on the raging deep.

At three o'clock on Sunday morning we sighted the National Line Steamer Spain. She bore down upon us, arriving at six. Captain Kennedy went aboard, and after negotiating with Captain Grace of the Spain, it was arranged that the latter tow us into Queenstown for and in consideration of $25,000 in gold. After some difficulty a line was carried from the Berlin to the Spain, the vessels were attached by a large hawser and forty-five fathom of chain, and at nine, A. M., we proceeded in tow, and, I may add, in high glee. This was a deliverance we hardly dared hoped for, and for which we were duly thankful.

The next day, Monday, was the most beautiful I have ever experienced on the Atlantic. The weather was very warm, and the sea without a ripple. Tuesday was a pleasant day also, but there was a stiff breeze. At half-past twelve on Wednesday morning, Fastnet lighthouse was sighted. Land and daylight put in an appearance simultaneously, and after a beautiful sail along the coast, we cast anchor in Cork Harbor at 2.20, and reached Queenstown by tender at four.

The South coast of Ireland looks barren and strikes one as being almost uninhabited. The headlands frown darkly, and little is seen in the way of green fields or stately trees to relieve the eye. Coming up past Staten Island to New York at this season, everything is green and looks bright and cheerful. Cork Harbor is said to be one of the finest in the world. It is certainly very handsome; there is no bar, so that vessels can come in and out without regard to tide. The Great Eastern anchored in it in safety. Queenstown is a nice little place, and between it and Cork—15 miles up the river Lee—there is some splendid scenery. At the mouth of Cork Harbor there are two large forts. The well known convict depot, Spike Island, lies in the harbor between the forts and Queenstown.

After all, we had a very pleasant passage, occupying only eleven days. The weather was very pleasant throughout. I have never crossed the Atlantic yet without a storm of some kind, but during this voyage the sea was scarcely rougher than it often is on the North River. Had it not been for the break-down, we should have made an excellent trip. At the time of the accident we were thirty-six hours ahead of the Spain, which started at the same time. The Berlin would have reached Queenstown Sunday morning; the Spain not before Tuesday. But things don't always come out as we could wish, and so we were glad to come in in a very undignified position behind the vessel we had so often derided. The evening before we reached Queenstown the passengers presented a testimonial of confidence to Captain Kennedy, who made a neat little speech in reply; as the Queenstown passengers passed the Spain in Cork harbor, three rousing cheers were given for Captain Grace, and three more for the Spain. The latter vessel proceeded to Liverpool, whence steam tugs came and towed the Berlin.

The best days' run we made in the Berlin was 362 miles, on two occasions; the smallest thirty-four, during the accident. It might interest some to know the salaries of the principal officers of the ship. If I am able to find out what operators are paid in the several offices I may visit, this will help OPERATOR readers to form an idea of how high a pecuniary value the British government places upon the services of lightning waiters. Captain Kennedy, commodore of the Inman line, has a salary of £700 a year; £1 is worth $5 in gold. Not a very brilliant salary, some one will say; no, not perhaps in the eyes of Americans, but in England it is considered very comfortable. One can live very nicely, indeed, on £100 a year. Remember, also, that the Captain, and other employés of the vessel, are boarded besides. The first officer has £14 a month; the second, £10; third, £7; fourth, £5; chief-engineer, £17; boatswain, £7; boatswain's mate, £5; ordinary sailors, £4:10. The length of the Berlin is 520 feet, the breadth 45 ft. She has what are called double condensing compound engines, with all the latest improvements. They are 1,000 horse power, and so made that the steam is used twice instead of escaping after going through once, as formerly. The Berlin is a noble ship in every sense of the word, and almost as steady in the water as a rock. The shaft which broke had the flaw when it was put in two years ago, and the wonder is it didn't break sooner. It was completely hollow nearly all the way round. The shaft was five feet in circumference.

Although I didn't reach Cork until eight o'clock last evening, Wednesday, I visited the main telegraph office before resigning my weary limbs to rest. Cork is a city of 78,000 inhabitants. Although the telegraph is now operated in connection with the post office, the office here is not in the same building as the post office, there not being room. A new post office is being built, however, which is to be completed in a year. They will then be all together. The present office is rather a dingy affair. Seventy operators are employed. The number of messages average from twelve to thirteen hundred a day, with about three hundred press dispatches, running from twenty to a hundred and fifty words each. There are twenty five Sounders, three single needles, two A B C, 2 Wheatstone, one Morse inking instrument and two duplexes—one to Dublin, and one to Limerick. The office keeps open all night, each operator working eight hours. Forty-four wires enter the office. There are four branch offices in the city. The manager (called superintendent here), has a salary of £275 a year, his assistant £200. The two chief operators (called clerks in charge), £110 each. The operators are classified into three grades. In the first class, salaries here commence at 27 shillings a week, and are advanced one shilling and six pence a week every year until they reach 35 shillings. Second class, 22 to 27 shillings, increased in the same manner, Third class, 14 to 21 shillings, increased one shilling a week every year. A shilling corresponds to the American quarter. A penny is two cents.

I am writing this in the hotel in Cork. I know it is disconnected, but I have tried to give only what I thought would interest the general reader, and to say that in as few words as possible. It was late when I retired last night, feeling too tired to even commence this letter, and as I take the 10 o'clock train for the Lakes of Killarney, you see I have not had much time to write it. If it will interest any, I might say that I had a very pleasant trip indeed, so far. There were only two others in the room with me, both very pleasant fellows; the food was very rich, and the sea air gave us so fine an appetite that we fully enjoyed it. For my part I don't know that I ever felt better in my life. I shall keep the readers of THE OPERATOR informed of anything I may see on my travels. In the meantime I must say good bye.

W. J. J.

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Government Telegraphs.

BENEFITS OF A FREE AND PROMISCUOUS TRADE.

BY WERNER.

No one knows better than the average true Briton, whose flag has "braved a thousand years, the battle and the breeze," how much that great country is ahead of our own. No nation can afford to pat us on the head so patronizingly, for all England is aware of our many weaknesses, and calls our attention to them so frequently that we are quite familiar with them ourselves. The other day a man was sentenced to jail there for one week, for pelting eggs (having provided himself with a pocketful for that purpose) at an officer in gorgeous uniform at the Westminster County Court; but, after producing witnesses who proved that he had been in America, and had "imbibed American ideas," the learned Judge concluded to mitigate his sentence, and, fully appreciating the forlorn and desolate condition of an Englishman who had "imbibed American ideas," he let the unfortunate traveler go "with an apology." The English paper does not make it quite clear as to which side apologized, although it leaves us to presume that it was the Judge.

But it is in the matter of the control of the telegraphs where England points the double-needle of scorn at America, and flouts before our eyes the polarized ink-writers and magnetic bells which are so vastly superior in slowness, to our own hum-drum Morse sounder and combination printer. Seven years ago, the telegraphic profession of England was found owing fabulous sums of money to confiding boarding-house keepers; its members were frequently found traveling afoot toward some new region where the vastness of their financial ruin would cease to haunt them, and many other American customs were found to be slowly gaining upon them. At this critical time their Government stepped in and regenerated the profession by eating it up, together with its receipts and the receipts of several other departments of the Civil Service. Americans do not want to follow the financial schemes of the Postal Telegraph service, as it is well-known that it never paid, and that several other branches of the Government are "out" by sundry loans to this Benjamin of a great political family, but it is the *esprit du corps*, and the self-sacrificing love of labor which employment under the Crown has infused into the telegraphic profession that I desire now to draw attention to.

The London *Telegraphist*, in a late number, just received, mentions in an exulting manner that the "clerks" (operators) at Birmingham, had established a Co-operative Store in connection with the telegraph office, and that a managing committee, consisting of Messrs. Bennett, Hides, Jinks, Tuckwood, and Whale were carrying on the business in a most satisfactory manner. Now, under the old system in England, a telegraph office was always looked upon by the operators as a place where a man received a tolerably good salary for resting himself after a fatiguing game of cricket, or for the purpose of talking to the lady operators on the wire. At the first blush, it may seem strange to us who are compelled by sordid hucksters who run telegraphs only to make money, to send 400 messages per man per day, why a jolly Englishman whose line of duty was not distinctly mapped out, should take any pains to find out exactly what those duties were beyond being on hand once a fortnight to be paid; but, a little reflection will show us the true spirit which a Government Telegraph has instilled into our professional cousins. It seems that under the new *regime*, the Government, to elevate its servants, seeks to combine the demeaning occupation of a telegrapher with the loftier calling of that brilliant conversationalist, the street peddler. Nor is this unreasonable in the face of the facts. The proportion of messages transmitted in England to the number of operators employed, averages, the year round, about 15 messages per day for each man; therefore, it seems a stroke of policy worthy of a British Postmaster-General, that on days when 75 operators have only 23 messages amongst them, they avoid a good deal of confusion and exhibit much of the boasted British good sense by allowing one man to do the telegraphing, while the remaining 74 make sorties into the surrounding country selling patent soap and moth-destroying powder.

Of course, it will be claimed by that nation of shopkeepers that the Co-operative Store is solely for the use of the telegraph office, but every one over here knows that the law (XVII. Vic. cap. III.) prohibits any man who keeps a store from patronizing it himself, to the exclusion of every other British subject. With this obstacle to a restricted trade in view, it is safe to infer that the Co-operative Store has already had a "grand opening" for the general public; and, it is more than likely that the "Clerk-in-Charge" (chief operator) may at this moment be found gathering up in one hand seven inches of the rear of an ill-fitting coat on the back of a rustic purchaser, and solemnly uplifting the other hand in swearing that it fits him "like the paper on the wall."

Birmingham, like our own Boston, has always kept herself well to the fore, in peace times, and the only marvel to us Americans is, that this brilliant electro-commercial idea never struck a Birmingham man before. Birmingham has among her "sights" a bull-ring, from which they desire to have the world believe that there are fierce matadors in Birmingham. But it is a place of peace, although whenever there has been any fighting to be done in England, Birmingham has ever been the first to move. All the threats of making war, upon certain contingencies, "from end to end of the world," are made in Birmingham, and all the songs of ruling the waves, etc., are sung in that intensely patriotic town. And then when the eventful day comes, John Bright always opens the slaughter with a ringing speech criticising the home Government; and if the carnage happens to be in Kent or Cornwall, the Birmingham warriors move at a moment's notice, and arrange themselves in martial array on the summit of Ben Nevis. This arrangement enables them to listen to John Bright's eloquence without interruption, to demonstrate at their leisure the weakness of their own Government, and, at the same time, to write withering letters of encouragement to the Lancashire troops on the field of battle.

I mention these facts merely to show that men of such liberal and fertile resources could never be expected to waste their energies on the telegraph alone; and now comes over the sea the Utopian picture of a Birmingham operator measuring out molasses to a transient customer in the store, while he keeps a press special, half finished, waiting in the telegraph office adjoining. Now take the Birmingham night force, under this excellent postal system. The first man off duty, instead of going direct to a billiard saloon and "putting up" a new debt of three dollars on the proprietor, goes meekly into the official store, and puts the necessary amount of sand in the sugar for the next day's sales. While a wire is interrupted by "contact" (a cross) its operator can descend to the store, and, while the lineman is repairing the fault, manufacture a considerable quantity of pure Java coffee, simply by mixing one part of Laguayra to four parts of old burnt peas. While Messrs. Bennett, Hides, and Tuckwood, of the committee, are pelting the disgusted cockneys with disintegrated Morse symbols, Messrs. Jinks and Whale, as a sub-committee, will be found putting a "prime dairy butter stamp" on the latest consignment of rank oleomargarine. If Mr. Jinks gets off early in the evening, he will have to come around at seven o'clock sharp the following morning and take down the store shutters; while Mr. Whale, who was probably detained late the previous night by a long special to the *Daily Telegraph*, will come around at noon prepared to drive the mule, and serve orders for groceries at the suburban residences. The unfortunate creature who works the Welsh wire one week will be allowed, as a counter-irritant, to put in the following week behind the butcher's block in the Co-operative Store. We are thus afforded a sublime example of official discipline, and it only remains for the benighted Americans to institute a Postal Telegraph system, and do likewise.

But, if the system is to be carried out, they need not stop at store keeping. There is no reason why an energetic English operator, with a keen appreciation of a commercial transaction, should not employ the remainder of his idle time profitably. When he has sent a shilling message and made an extra sixpence by over-charging the customer, no sensible Birmingham man should object to making the bill an even two shillings by carrying the customer's portmanteau to the railway station. If this hint from America is acted upon by the British authorities, English telegraph offices will be at once supplied with hand carts and wheelbarrows for heavy trunks. Sedan chairs navigated by accomplished telegraphers will be provided for the transportation of corpulent old ladies, and all the larger offices will be supplied with crow-bars, sledge-hammers and pick-axes, and on unusually dull days, when there is very little telegraphing to be done, no luggage to carry, and the official grocery store is deserted, the operators could turn out *en masse* and repair the pavement in front of the office.

While heartily welcoming the long-looked-for signs of awakening vitality in our profession, and according all honor to our cousins abroad, a word of advice to them from us might not be out of place. Our fraternity here might very properly point out to our English professional brethren many other occupations to be combined with telegraphing which would afford them more vigorous exercise, and prove in the end, probably, less disastrous to their bank accounts than keeping even a co-operative store. There are many other things which broken down telegraphers, who are fit for very little else, can do. Teaching telegraphy at fifty dollars a head, on the Kansas plan, and raking in your salary from the benevolent telegraph company at the same time, is one of the easiest, although one of the thinnest ways of scheming out a competency; walking twenty-five miles a day, in summer, in search of a job; shoveling in coal for the office in midwinter; climbing and painting poles and scrubbing the office floor are all considered as important branches of the profession in this country, and are at present monopolised by comparatively ignorant and inexperienced telegraphers. Cleaning the battery is a healthful occupation indispensable to a thorough postal system like the present fag end of the British Civil Service. Cleaning the battery is also, at least in America, a position of great trust, since you have to come around every morning at a quarter past three and work until half past eleven at night. Cleaning the battery, is, moreover, eminently a scientific job, requiring a profound study of the art of always having the wrong "locals" in perfect working order, and of going to sleep in some dark corner of the battery room where you can never be found when wanted. All these avocations would be greatly dignified, if not practically benefited, by the voluntary enlistment of an odd aristocratic operator or two, and there is no reason why an able bodied Brummagem telegrapher, competent to lug a hogshead of sulphate of copper up three flights of stairs, should not be forced to let the Jews alone in their notorious traffic in old clothes, and to devote his time to crowding out some of the vulgar men now swarming in the lower ranks of our profession. [illegible]

Dashes Here and There.

Benjamin Franklin was the Adam of Lightning Rod men.

A panic-stricken Pennsylvanian sent the check to a collect message thus: "10 paid—at the other end."

Monroe, the great American traveler, writes six words on a No. 1 blank now. Horace Greeley used to get eight in the same space.

Hon. Wm. Orton made an eloquent farewell speech to Senator Conkling, on board of the Mosel, June 16th, just previously to the distinguished statesman's departure for Europe.

The first submarine cable in the world was laid 27 years ago. across the Straits of Dover.

The International Ocean Telegraph Co. announced a quarterly dividend of two per cent., payable on the 23d (June).

His head was full of election excitement when he wrote: "Will Hayes carry the town to-day," instead of "Will says sorry, be down to-day." He had the check all right, anyhow.

The Difference: When a chief operator comes late the officials look over it; but when a common operator toddles in two minutes behind time, they all look into it.

The Dairyman's Serenade: "'Tis butter little faded flower." The Butcher's: "Meat me by moonlight alone." The Telegrapher's (to his uncle): "I'll not leave thee, thou *loan* one."

The Postmaster General has just appointed a Commission to revise the rates of tolls paid by the Government to the telegraph companies, and to fix them for the ensuing fiscal year.

A royal decree has been issued at Madrid approving the laying of a second cable between Santiago de Cuba and Jamaica, permission for which was solicited by the West Indies and Panama Company.

The Queen of England has sent a silver inkstand, specially designed and manufactured, to the directors of the Anglo-American Cable Co. as a mark of appreciation of the exceptional facilities furnished to the British Centennial Commission.

On June 18th, the W. U. opened the office at the Surf Hotel, Fire Island, connecting with the telegraph system of the Company at Babylon, Long Island, by sub-marine cable across the Great South Bay. Fire Island is thirty-five miles east of Sandy Hook.

Last Spring 4,000 telegraph operators struck work in Turkey, but we have heard nothing from them since. The strike resulted from a non payment of salaries. Our special correspondent at Karageorgevich stopped writing letters about the same time—probably for the same reason.

Hon. G. F. Train on Lightning Flashes: Mr Editor. Immense. Sent your book to Emperor William to-day. The only way to circumvent Orton and Eckert is to evolute. Advise all your operators to read my articles on evolution. Next book you write I will wipe out Western Union with an epigram. Old Grant is politically dead, and I squelched the A. and P. on my last journey round the world in ninety days. Evolution theory allows me time to read anything but your book. [illegible] I made psychologic exception in your case. Have given up talking, reading, eating, sleeping, [illegible] heading, coming late, borrowing money and shaking hands with adults. Devoting all my time to evolution. Just refused four thousand dollars to write for the *Journal*. Orton quakes (sic). The Future President of U. S.

A Good Authority on Lightning Flashes.—"Lightning Flashes" is a volume of sketches, stories, and jokes, mostly humorous, about the telegraph. Many of the authors are well known writers for the funny columns of our newspapers, including W. P. Phillips, "John Oakum," [illegible] "Chops," F. O. Chase, "Nut Coal," and sketches are also contributed by Benson J. Lossing, Charles Barnard, George H. [illegible], and others known in the more serious walks of literature. The sketches being most of them about the telegraph, will have a peculiar relish for telegraphers, to whom it is intended to be of special interest, but they are sufficiently interesting or funny to be enjoyed by readers who know nothing about telegraphy, technical terms and explanations being for the most part avoided. The volume is printed in a handsome square octavo, and is embellished with portraits and other illustrations, and neatly bound.—*American Bookseller*.

THE
OPERATOR
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

July 1st, 1877.

DURING MR. JOHNSTON'S ABSENCE IN EUROPE correspondents will please address all matter for the literary department of the paper, personals, items of news, etc., to JOSEPH CHRISTIE, P. O. Box 2675, Philadelphia, Pa.

Subscriptions, orders for books, etc., or in connection with THE OPERATOR Purchasing Agency, and all business communications generally, as well as New York City items, to W. J. Johnston, Publisher, P. O. Box 3332, New York, as usual, to whom Post Office orders, drafts, etc., are to be made payable.

Correspondents will do much to facilitate the business of the paper by bearing the above instructions in mind. Readers are cordially invited to forward items of news; also, when anything likely to interest telegraphers appears in their local paper, they will confer a favor by marking the article, and mailing the paper to J. Christie, P. O. Box 2675, Philadelphia, Pa.

THE WESTERN UNION dividend of one-and-a-half per cent. will be paid on the 14th inst. Its transfer books will re-open on the 16th.

THREE years ago to-day (July 1st, 1874), the child, Charlie Ross, was stolen by Mosher and Douglas. There has been more telegraphing done, on his account, than most people can form any conception of.

WE have received from Texas, a certificate of stock in the New Orleans and Ohio Telegraph Compnny, dated November 21st, 1851—twenty-six years ago. The gentleman in whose name this curious relic was drawn, Mr. L. K. Preston, was at that time connected with the company, but is now a prominent merchant in Calvert, Tex. Messrs. H. W. Smith and W. Tanner, whose signatures are attached to the document, as president and secretary, respectively, are still in the telegraph business.

AN unusual press of matter has crowded out of this issue many communications which we were very anxious to publish. Among them are some recent personal notices, and "Eyes of Blue and Eyes of Brown," together with the continuation of "The Thorsdale Telegraphs." "Eyes of Blue," etc., will be given to our readers in the next issue, without fail, and will be followed by all that has already accumulated, just as fast as we can find room for it.

WILL our patrons and agents please read carefully the explicit notice at the head of this column with regard to directing their letters. Much time can be saved by doing so.

MUCH credit is due to every one of the telegraph managers of Pennsylvania for the able manner in which the tremendous rush of press business was disposed of on the occasion of the recent wholesale executions on the 21st ult. The Western Union worken five wires between Philadelphia and Pottsville, one of which was duplexed, and no delay of any kind occurred. A good share of our commendations should be given to Manager D. K. Teter, of Pottsville, for the able and efficient manner in which he conducted the business during the sudden and perplexing difficulties.

THE steamer Geo. S. Wright, which was wrecked off Vancouver's Island in January, 1873, with, as was supposed, a loss of every soul on board, (though it now appears, from the confession of an Indian named Conna, that part of her crew escaped to shore and were massacred by Flathead Indians), was, at one time, a telegraph ship, and will be remembered by some old telegraphers. Some dozen years ago she belonged to the Russian and Siberian Telegraph Company, serving as a transport, and on her last trip to Petropaulovski, Kamstchatka, she demonstrated the almost utter impossibility of constructing or maintaining telegraphs in that region.

WE may with pardonable pride call attention to the excellent foreign letter of Mr. Johnston, in this issue. Our subscribers will find a good deal that is interesting and instructive therein, and may safely look forward to much more. Tiring of a broken-down vessel and seeking new sights, Mr. Johnston leaves the ship at the nearest port, and now addresses us from the Emerald Isle—the "Innis-na-veevah" of the ancients. We are aware of no place so rich in innocent legendary lore, so full of themes for a graceful writer, and we are sure that Mr. Johnston will do the subject ample justice. There is a rapture in wandering over the green slopes of Tara's Hill, where princes and powerful nobles once held despotic sway and indulged in revelry; there is enchantment in musing by famed Killarney, in these gray summer twilights, when elves and hob-goblins are popularly believed to be disporting themselves on the green mountain heather, and we are sure that Mr. Johnston will improve the situation, to our benefit, which Fate and an untoward accident to the vessel has placed him.

OUR readers will find room for reflection in the correspondence, given in another column, between Manager W. J. Dealy, of the A. and P. of this city, and Manager T. M. Robinson, of the W. U., at St. John, N. B. Mr. Dealy's prompt and generous action in the matter reflects great credit on himself as well as on the vigorous young corporation which he represents, and the manly reply of Manager Robinson shows a highly commendable spirit in the New Brunswick operators.

The Western Union Quarterly Reports.

A good deal of apprehension, and much of it doubtless without foundation, has manifested itself since the publication of the last Quarterly Report of the Western Union Company. The report, as it stands now, is a very favorable one, but——

The preceding report—that for the quarter ended March 31st—based necessarily on partially incomplete returns, estimated the net profits of that quarter at $757,613. To this sum was added the surplus of January 1st; and there was deducted therefrom dividends, interest on the bonded debt, appropriation to the sinking fund and purchase money for rival telegraph stock, leaving an apparent surplus of $357,333. Now, in a revised statement—literally the *official* report for that quarter—presented by the president on the 14th ult., it appears that the net profits for the said quarter were only $696,619, instead of $757,613 as had been previously estimated—a miscalculation against the company of $61,000. The revised statement then adds items of expense, which were not included in the "estimated" report of March 14th, as follows: For construction (including new lines in the Pacific division during the last half of 1876) and sundry purchases of telegraph stock, not before reported, $167,000; thus, the net profits for the first three months of the present year are a quarter of a million dollars less than they were "estimated" to be in the report issued March 14th. This correction still leaves the respectable surplus for that quarter of $128,000; and, if the report for the second quarter has been estimated correctly, the surplus is $10,000 *more* than the real surplus for the previous quarter.

But if—though we scarcely think it possible—if the estimates just issued should subsequently prove to be as far wrong as were the previous estimates, there will not only be no surplus at all, but nearly $100,000 will be necessary to balance the account.

Speculation and competition have held the Western Union under a desperate fire, which, if we can judge correctly, has not always been delivered in the open field. On the day of the publication of this report (June 13th,) desperate raids were made on its stock in the market. At noon, by dint of distorting the above figures, and circulating rumors of the Western Union's utter failure to impede the progress of the Atlantic and Pacific Company toward New Orleans, the former's stock was forced down two per cent. At 1 P. M., on the same day, wild rumors of the company having "passed" the dividend forced its stock down two per cent. lower still. A dozen important—we are inclined to say ruinous—reductions in tariff have been made during the present year, and tariffs which a little over twelve months ago were $2.00 are now down to 25 cents. It seems clear to us, whatever may be said to the contrary, that the telegraphic receipts are now less than prior to the recent sweeping reductions, although the actual work performed has been much greater; but, looking at the matter as an operator, we are not quite so clear on the point as to who is to suffer in the long run. We should entertain no feelings of admiration for professional stock jobbers—those men teeming with strategem, and ravenously hungry for spoils—nor for those who are too profuse in their professions of working exclusively "for the public good." The best telegraphic management is—*not* that which transmits the public business at the lowest rates, but that which transacts its business at such rates as will afford a just remuneration to those who have their money invested in it, and will allow such a fair compensation to its own faithful employés as will provide them with respectable raiment, good food and comfortable homes, and enable them to educate their little ones. Anything else is a monstrous bubble, and "a uniform rate of twenty-five cents for ten words," *if it is not a paying rate*—ever holding these equitable objects in view—is a wrong upon its own investors, an injustice to its own employés, and a future loss to the public. We say a future loss to the public, because such a course, if it is not a paying one, tends inevitably to a consolidation of conflicting interests, upon the consummation of which the winning party, flushed with victory, will be apt to tax the public and make good its losses, incurred during the struggle, in more ways than one.

It is impossible to conjecture now how far these reductions of rates or the speculative assaults may extend, since the managers firmly but courteously refuse us any information beyond what has been published; but, as the Western Union dividend just declared is at the rate of nearly 10 per cent. per annum, with the surplus placed at $138,000, we think those who suppose that the old concern is about to expire had better not commence too soon to toll the bell.

"Only a Woman."

We are in receipt of several letters taking exception to a communication published in a recent number of The Operator, speaking of the graces and Christian life of a certain lady operator, headed: "Only a Woman." Our esteemed correspondents do not seem to have caught the true meaning of that phrase, and wax indignantly philosophical, presuming that we are guided by a spirit of animosity toward, or at least a lack of appreciation of, their sex. We have laid each of these letters aside because they are exactly of the same tenor, and their authors are evidently very much at sea on the subject. When the poet writing tenderly of the grave of a loved one, says; "Only a mound—o'ergrown with grass," few people would take exception to his using the word "only"—they enter into the *spirit* of his language.

Now, a great many people—ignorant people, it is true, but a great many nevertheless—expect no valorous or chivalrous deeds from woman, for woman—especially handsome woman—has frequently many faults; although, in that respect, the best of men need deal lightly with her. But, as long as the world contains comparatively few true philosophers or philanthropists, we will be compelled to listen to the stereotyped phrase: "Only a Woman." In these not overscrupulous days the weakest have to take the wall, and in the great crises of life women are generally shut up at home. In war, the most tremendous and appalling of all hazards, men only are mounted on wild chargers and go clattering down the hill-sides to meet the foe; men only are expected to storm forts and charge batteries where every volley mows them down in swaths; men only are called upon to go forth in winter's snows and to lie down at night by the camp-fire on their country's frontier, to watch and defend every inch of it; and, as people place their trust against invasion, spoliation and robbery mainly in men, they soon come to look upon our quiet sisters as less bold and less strong. Woman's years of subtle work of peace is obscured in the smoke of one great battle field, and we soon forget that she is nobler and finer and more civilized than we are. It is the way of the world, and when a true woman does step to the front and casts us in the shade, we are very apt to exclaim: "Only a Woman."

But our fair patrons and professional sisters need not be afraid that we will lose sight of their merits. The character of a good woman passes unperceived by herself, into the characters of those about her. Her missionary work is forever spreading and taking fresh root, but it is performed so meekly, so quietly and so *naturally*, that we come to expect it of her. It may seem that we give her very little credit for it, but she finds ultimately that every one of her pleasant smiles, every one of her kind works on the wire has not only impressed others, but elevated herself. Many a philosopher has written on this subject and marked out her course, many a Chesterfield has laid down for her the code of good breeding, and though she, being "only a woman," may be utterly unconscious even that these mentors ever lived or wrote, she posesses naturally all the attributes which they would have her possess. She will find a quiet satisfaction and a solemn repose in knowing that she has performed some little act for the comfort of others, which will soothe her sleep at night and make the world appear brighter every day even to—"Only a Woman."

Lightning Flashes—Change in Price.

Some of our agents seem to have misapprehended the notice in our last issue with regard to the change in the price of Lightning Flashes. That notice applied particularly to book-publishing firms throughout the country, and only to our own agents when they sell the book to outsiders To our agents who are telegraphers the terms will be as heretofore, and for single copies to *all operators*, the price will remain at $1.50.

The demand from outside publishing houses desiring to supply the general public with this volume of excellent summer reading became so great, and the expense of the numerous engravings is so heavy, that we felt compelled to increase the price *to them*, to such a figure as would allow us a fair profit.

* * *

There is a new deal in learners' instruments. The Western Electric Manufacturing Co. offers the well-known "Private Line" nickel-plated at the same price as for brass finish. Manufacturers have heretofore charged an extra 20 per cent for nickel-plating, and the present offer is a radical innovation.

The First Sound Telegraph.

The project at present under consideration in England, of establishing a line of telegraph across the African continent from the Cape of Good Hope, reminds us of the curious fact, not generally known, we believe, that the earliest system of telegraphy for signaling over long distances originated among the African negroes. It is still more remarkable that the means used were telephonic, and the signals were read by sound, and not by the eye, as in the case of the semaphore, or other early signaling devices. The "elliembic," as the instrument used is termed, is still in existence, and has been in use from time immemorial in the Cameroons country, on the west coast of Africa. By the sounds produced on striking it, the natives carry on conversations with great rapidity and at several miles distance. The noises are made to produce a perfect and distinct language, as intelligible to the operator as that uttered by the human voice.

* * *

An Item for the Day Force.—At Spitzbergen, on the longest day in summer, the sunlight lasts without intermission, for 2,500 hours. The night operators have to come around and relieve the day men 200 hours for dinner. You can come seven weeks late without losing more than half the day.

Themes for the Thoughtful.

The eyes of other people are the eyes that ruin us.

Expense of time is the most costly of all expenses.

As a moth gnaws a garment, so doth envy consume a man.

To some purpose is that man wise who is wise at another man's expense.

People seldom improve when they have no other model than themselves to copy after.

The man who can be nothing but serious or nothing but merry is but half a man.

Our natures are like oil, compounds with anything, yet still we strive to swim upon the top.

The woman who is resolved to be respected can make herself to be so even amidst an army of soldiers.

The greatest pleasure I know, is to do a good action by stealth, and to have it found out by accident

The proper means of increasing the love we bear our native country, is to reside some time in a foreign one.

We do not know of how much a man is capable if he has the will, and to what point he will rise if he feels free.

The power of applying an attention, steady and undissipated, to a single object, is the sure mark of a superior genius.

The old saying is expressed with depth and significance: — "On the pinnacle of fortune man does not long stand firm."

We gain nothing by being with such as ourselves. We encourage one another in mediocrity. I am always longing to be with men more excellent than myself.

A man is like a bit of Labrador spar, which has no lustre as you turn it in your hand, until you come to a particular angle; then it shows deep and beautiful colors.

Books are the legacies that genius leaves to mankind, to be delivered down from generation to generation, as presents to the posterity of those who are yet unborn.

It was an excellent rule which Marcus Antonius prescribed to himself in his private meditations. "Manage," says he, "all your actions and thoughts in such a manner as if you were just going out of the world.

God has made no one absolute. The rich depend on the poor, as well as the poor on the rich. The world is but a mere magnificent building; all the stones are gradually cemented together. There is no one subsists by himself alone.

Charity makes the best construction of things and persons; and is so far from being an evil spy, a backbiter, or a detractor, that it excuses weakness, extenuates miscarriages, makes the best of everything, forgives every body, serves all, and hopes to the end.

Proportion thy charity to the strength of thy estate, lest God proportion thy estate to the weakness of thy charity; let the lips of the poor be the trumpet of thy gift, lest in seeking applause thou lose thy reward. Nothing is more pleasing to God than an open hand and a close mouth.

Domestic happiness is the end of almost all our pursuits, and the common reward of our pains. When men find themselves forever barred from this delightful fruition they are lost to all industry, and grow careless of their worldly affairs. Thus they become bad subjects, bad relations, bad friends, and bad men.

'Tis a little thing
To give a cup of water; yet its draught
Of cool refreshment, drained by fevered lips,
May give a shock of pleasure to the frame
More exquisite than when nectarean juice
Renews the life of joy in happiest hours.
'Tis a little thing to speak a phrase of common
comfort
Which by daily use has almost lost its sense;
Yet on the heart of him who thinks to die unmourned,
'Twill fall like choicest music.

Scientific Department

[This department is under the charge of Mr. H. Van Hoeven [illegible] [illegible] Mr. Van H[illegible] [illegible] to electricity, [illegible]]

ELECTRICAL MEASUREMENT.

III.

[illegible]

In measuring electrical resistances, as in measuring lengths or in weighing substances, some standard or unit, to serve as a starting point, is necessary. There are no such things as *natural* units, consequently they must be proposed and adopted by mutual consent. The foot, quart, pound, etc., have been adopted in this manner. They represent only arbitrary lengths, quantities, or weights, and their original proposers might have made them a little more, or a little less, without altering their convenience or usefulness.

When the knowledge of electricity began to be extended, the want of some such unit was severely felt, and several were devised for the purpose; most of these have been abandoned in favor of the ohm. This unit represents the resistance offered to the passage of the current by a piece of No. 9 iron wire (B and S. gauge) one sixteenth of a mile, or 330 feet in length. The resistance is always the same, of course, whether the quantity of current passing be large or small. It must be clearly understood that the effect of the resistance is to weaken the current, and that this weakening is directly in proportion to the resistance offered by the conductor.

If it were possible to split the piece of wire mentioned above, lengthwise, into two parts, each of which should possess the same weight, the resistance of one of these pieces would be twice that of the undivided wire. In other words, with half the weight, a piece of iron wire of the same length would offer double the resistance.

In arranging sets of resistances for use in testing, it would be very inconvenient to use wire so bulky. There are two methods of reducing the size. First, by using smaller wire, secondly, by using wire made of some metal which shall offer greater resistance to the current. German silver wire is the best for the purpose, as it not only offers great resistance, but is affected very slightly by changes in the temperature. If wire made of this metal can be procured, covered with silk or cotton, an excellent rheostat (or set of resistances conveniently arranged) can easily be made. If not, a tolerably good one can be made of common, bare, iron wire, such as may be cheaply procured at the nearest hardware store. There will be required: a pine board, twelve feet in length, eight inches wide, ¾ inch thick, 360 feet of the finest iron wire procurable, a paper of small carpet tacks.

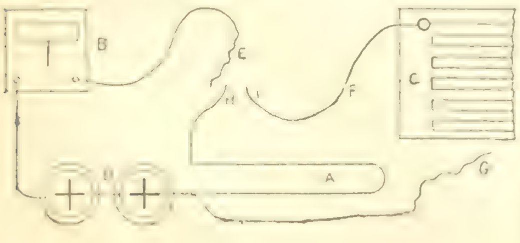
Fasten the wire to the board by means of the tacks in this manner.

The lengths or courses may be about a quarter of an inch apart. Use screwposts, or screws and washers as in article 2, for the terminals. Care should be taken not to injure the wire when driving the tacks in.

In measuring electrical resistances, the accuracy of the rheostat is of the greatest importance. Upon this depends the correctness of the tests made. Too great care, therefore, cannot be taken in the operation following:

First, get a standard ohm. This can be done in two ways. By measuring out 330 feet of No 9 iron wire, or by writing to some one versed in this work, and requesting one as a favor. Should no obliging friend be available, write to the editor of this department.

Having procured the unit, connect up the galvanometer (article 2) in this manner:



A local battery of two cells will be sufficient. In this diagram A represents the standard, B the galvanometer, C the board rheostat, and D the battery. If a two way switch can be placed at E, it will facilitate the operation. All of these connections must be made with copper office-wire. The iron wire will not do.

Place the galvanometer B so that the needle points north and south. The pointer will then point to the east. The coil should be on a line with the needle, that is, it should also range north and south.

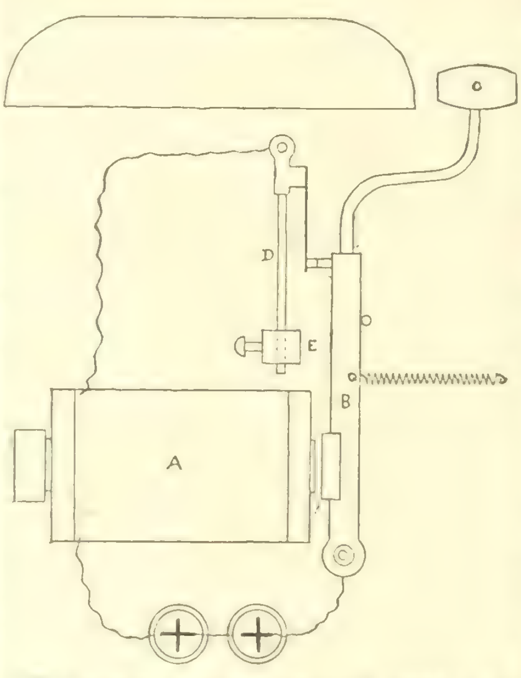
Connect the wire E with the wire H. This will cause the needle to be deflected. Turn the pointed wire or marker, so that its extreme point nearly touches the pointer. This is for the purpose of noting the position of the needle. Then disconnect the wires E and H, and connect E to I. Then touch the end of the wire G to the first course of the wire on the board. This will deflect the needle again. Slide the end of the wire G to and fro along the iron wire until the pointer stands just where it did when the standard unit was in circuit. One ohm will then have been measured off on the board. Mark the board at this point. Then connect the wire F to the point just found and marked, and measure off another ohm. Repeat this until the whole length of wire on the board is measured and marked off. Should the wire be as fine as common relay wire, or No. 30, the length required to measure one ohm will be about 14 inches, and the whole length will measure about three hundred ohms. The greatest care should be taken in making these measurements, and, if possible, they should be proved by comparison with a standard rheostat.

The first ohm marked off on the board should be divided into tenths, by means of ten divisions. This may be done with a pair of compasses, or with a foot rule. When finished, each division should be marked with its value.

The precise method of using the rheostat which has just been described will be explained in the next article.

ELECTRO MECHANICAL MOVEMENTS

N° 2



The magnet A, when magnetized, draws up the armature and lever B, causing hammer C to strike the bell. Motion is also imparted to pendulum D, swinging it outward, and breaking the circuit at the platina points. The lever B then is drawn by the spring to its back stop, where it remains until the pendulum, returning, closes the circuit. The whole operation is then repeated. The arrangement thus forms a slow vibrator. Its rate of vibration may be adjusted by the sliding weight E. It may be made to strike as slowly as three strokes per second. This vibrating device differs from all others in that it may be left on closed circuit, if desired. In this case, it is set in motion by a momentary opening of the circuit. It has been used as a striker for clock mechanism, and also in burglar alarms.

CORRESPONDENCE.

Young Operator.—A bar electro magnet may be made as you propose. The wire should be covered with cotton or silk, and should be proportioned in length and size to the battery used. If you intend to use your local battery, make your bar of soft iron, about five inches long, one-half inch in thickness, and wind with about 150 feet No. 24 (B & S gauge) copper wire.

Subscriber.—It is our intention to give in this department detailed descriptions, with engravings, of a number of duplexes and quadruplexes, as soon as space can be spared. They will be written in the same colloquial style as the articles upon electrical measurement, and will doubtless prove of general interest.

How Telegraphers Love.

In November, 1876, Miss Rosa Souvais, a beautiful young woman of nineteen, commenced suit in the Superior Court of Michigan against Edward Derum, a fine looking blue-eyed young man of twenty-three, and telegraph operator at the Grand Trunk Junc., Mich., for breach of promise of marriage. She claimed $5,000 damages, and a number of eminent lawyers were retained on both sides. The story is an old one—love at first sight, lots of simple letter writing, the advent of another girl, and the marriage of the latter to the defendant. The plaintiff's counsel on the 13th ult. read the love letters in court in a most dramatic style, and as he emphasized the pathetic pleadings of the forsaken girl, tears were shed freely by the jury and spectators. There was a dramatic scene in court as the counsel asked innumerable questions of Miss Souvais, and wound up by asking her if her love for Mr. Derum was still as strong as ever. He could make a point either way on a question like this; since, if she now loved a married man, it would be considered wrong, and if she did not love him now, it would help to prove, as the defendant's counsel claimed, that she contributed to break off the engagement. The defendant, hearing this question, gazed steadily at the floor, while the brown eyes of the plaintiff fairly flashed fire as she gathered up her drab dolman in graceful folds, and looking squarely at the man who forsook her, she said earnestly: "My love for Mister Derum is unaltered." Miss Souvais, by her extreme candor, took every one by storm, and the jury awarded her $1,000 damages; but did not intimate how this amount of ready cash was ever to be collected from an operator.

Echoes from 197.

Mr. Bradt has been given a day trick.

Chief Operator White, of Providence, visited the office June 21st.

Charley Miller goes to Newport as a temporary addition to the summer force of that office.

Miss Mary C. Saulsbury has been appointed operator at the Pequot House, New London, Conn.

Mr. C. H. Jennings leaves for Long Branch July 1st. He will probably remain till the close of the season.

Manager A. S. Downer has restricted the "subbing" privilege to cases of actual necessity. Brick and Hutch are disconsolate.

Eddy Welch and Johnny Moffitt work the St. Louis quad. For first-class, reliable work, there is no better team in the country.

It is rumored that a very charming young lady of this office has accepted a situation in San Francisco, and leaves for the "golden shores of the Pacific" at an early date.

Miss Nellie Hammond, whom a Boston correspondent enthusiastically describes as the "handsomest lady operator in the business," is subbing in Bridgeport, Conn.

In Chief Bogart's department the changes of late have been numerous. Jim Crate now works Newark. W. B. Bennett has been transferred to Cincinnati. Billy Pierce works Chattanooga, while Johnny Cleverdon and R. G. Stevenson have been respectively changed from the Baltimore to the Buffalo quad.

Telegraphers must be great admirers of base ball. A recent game between the Hartfords and Chicagos brought out a delegation of nearly forty from the W. U. office alone. *Apropos*, "Fergy," captain of the Hartfords, paid us a visit last week. George Walcott did the honors.

Harry Bennett, who invested a few thousand dollars in Western lands, not long since, has, it is rumored, cleared ten thousand dollars by the speculation, the land having appreciated to three times its original value. We understand he intends resigning soon, to engage in a more congenial, and, it is hoped, more lucrative business.

From the picturesqueness of its situation, its accessibility from New York and Philadelphia, and, above all, the handsome ladies, Bethlehem, Penn., has become of late years a noted summer resort for those of the *creme de la creme* who prefer the health-giving properties of its coal mountain atmosphere to the social dissipations of Saratoga and Long Branch.

Our English visitors still remain. They express great admiration for the superiority of our system as compared with their own, which they concede to be heavy and cumbersome, and in every respect inferior to the Morse. Timing business with the left hand, while sending with the right, excited considerable surprise, for "in London, you know, we have half a dozen 'clarks' to do that and nothing else, you know."

[If the English commissioners make any admissions that timing messages with the left hand while sending with the right has not been practiced in England for the last twelve or thirteen years, they are greatly in error.—Ed. Opr.]

During the past few months there has been considerable discussion as to the relative ability of Eddie Baileau, Fred Baldwin, and John Moreland, who seem, by popular consent, the more prominent of the many fine telegraphers employed in this office; among whom may be mentioned Loper, Landy, Leslie, Catlin, Harmon, Brick, Downier, Hutchinson, Merrill, Warren, Bennett, McEnroe, Tierney, Barbiere, Wood, Mitchell, Patch, Case, Pierce, and many others. Phillips designates Boileau as the "man with the steel wrist;" Baldwin has a host of friends, while Moreland is simply venerated by that class of young, ambitious telegraphers who regard the possession of unusual telegraphic merit as an accomplishment second to none even in the broad range of science or art.

As the telegraphic representative of a place so distinguished, Mr. Thomas Stevens, on his recent visit to this office, was the recipient of more marked attentions than is usually accorded in such cases. It is said that the experience of "traveled" telegraphers is both varied and great, but not even Hank Cowan, that Wandering Jew of the profession, has been the hero of more adventures than the modest young gentleman who is the subject of this personal. A native of Florida, the "land of magnolias and orange blossoms," Mr. Stevens became an ardent supporter of secession, and at the early age of twelve years joined the Louisiana Tigers as a drummer. The great prominence of his uncle (Hon. Alexander H. Stevens, Vice-President of the Southern Confederacy), together with his gallantry at the battle of Antietam, gave the young hero a social *status*, which, attracting the attention of General Longstreet, he was appointed an aid, with the rank of captain, on the staff of that bold fighter, which position he retained for three years, winning the highest encomiums from his superior officers for gallantry and daring, displayed on many a closely-contested battlefield. During his connection with the army Mr. Stevens formed the acquaintance of George Ellsworth, the celebrated rebel operator, and from him acquired a knowledge of telegraphy, merely as a pastime to relieve the monotony of camp life. He returned home at the close of the war to find his father, like the majority of wealthy Southerners, almost penniless, through the emancipation of his slaves. His bright expectations of a brilliant future being thus rudely dispelled, he concluded to turn his knowledge of telegraphy to some practical use, and, after making a tour of the South, he at last settled in Bethlehem, where he has become one of its most enterprising citizens. During the Presidential campaign he was a Tilden elector on the Democratic ticket, and is now prominently mentioned as the candidate of that party for the State Legislature.

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Generous Action of the A. and P. Co.

The following telegraphic correspondence explains and commends itself to the profession:

New York, June 23, 1877.

To T. M. Robinson, Manager W. U., St. John, N. B.:

Have our telegraphic friends suffered by the fire? What do they most need? How shall remittances or goods be forwarded, and to what address?

(Signed) W. J. Dealy, Manager A. and P.

Wm. J. Dealy: St John, N. B., June 23, 1877.

We are greatly obliged for your kind consideration. Several of our men were burned out and suffered loss, but we think, while there is so much destitution, that it would not be seemly to accept a special relief, as we are comparatively well off so long as we retain our situations. Our greatest need is sleep. (Signed) T. M. Robinson.

Washington Notes.

The Telegraphers of Washington, gave their annual moonlight excursion down the Potomac River June 20th. The affair created quite a stir among the "boys," and was the chief topic of conversation for days preceding. The large and commodious steamer "Mattans," was chartered for the occasion, and everything prepared which it was thought would in any way contribute toward the comfort and pleasure of the party. The boat left Washington at seven P. M., having on board a select company of about one hundred couples, mostly telegraphers and their friends. Chiefly among those present, we noticed Mr. Ed. Stewart and wife, Mr. Tone Stewart and wife, Mr. W. W. Burhans and wife, Mr. Harry McKeldin and wife, Mr. J. King and wife, Mr. R. W. Bender and daughter, and many others too numerous to mention. Our sister city, Baltimore, was well represented by the presence of Messrs Grape, Adams, Barclay, Marsh, Smeltzer, Hallenstein, and others. After a most delightful sail, during which the time was pleasantly passed by music from Eibner's Band, songs by Messrs. McCook, Ryan and Kelsey, we landed at the summer retreat known as "Marshall Hall." Here several hours were spent in dancing, everybody seeming in the best of spirits and to be thoroughly enjoying themselves. We returned at two A. M., well pleased with our evening's pleasure. We failed to mention having the pleasure of meeting Mr. Al. Childs, a well-known ex-operator, who was recently appointed chief clerk to public printer Defrees, a justly conferred honor. The clerical department, as also the A. & P. and the B. & P. Ry. deserve special mention for the goodly number of representative gentlemen. The affair was under the immediate supervision of Messrs. Burchans, Lombard, Traylor, Nicholson, Johnson, Drill and Hutchinson. Much credit is due these gentlemen for the successful manner in which the affair passed off, all arrangements being complete in every respect for the comfort of those who honored the occasion by their company. Your correspondent returns thanks to the Committee for many courtesies shown, and for the sumptuous repast furnished him. *

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Nip and Tuck,

AND TUCK SLIGHTLY AHEAD THIS TIME — GOOD COUNTER-HITTING.

In the matter of the Altantic and Pacific Telegraph Company in the suit for the condemnation of the right of way along the line of the Alabama and Chattanooga Railroad, Judge Bruce, of the United States Circuit Court, last month granted the motion of the attorneys of the Western Union Telegraph Company, restraining the A. and P. Company from further proceedings "until the further orders of the U. S. Circuit Court at Mobile." This is a most important decision.

The following is an entirely different case, and scores one for the other side. The Western Union held a contract, or claimed to hold one, with the South and North Alabama Railroad Company, for the right of way along their line between Athens and Montgomery. Notwithstanding this fact, the A. and P. brought suit against the railroad for a condemnation of the right of way, and the court has just decided in favor of the A. and P. Tel. Co., awarding one dollar damages for the condemnation of the right of way. This is another important decision, and opens the way for the A. and P. to Montgomery.

Later advices state that the application of the Western Union to have this decision set aside has been over ruled.

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New Books.

The Telegrapher's Companion. By F. W. Jones and M. L. Lawson. Chicago.

This excellent work commends itself, both by its cheapness and rare merit, to every telegrapher and electrical student. There are over thirty excellent diagrams, executed with the electric pen, which are accompanied by brief, though lucid explanations, covering every device used for telegraphic purposes, from the connections of a local circuit to the quadruplex and telephone. Repeaters, duplexes, galvanometers, annunciators, batteries, condensers, gold and stock circuits and printers are all illustrated and explained in such a manner as to become clear to the most inexperienced student. Mr. Jones has for a long time been in the front rank of American electricians, and his name is a sufficient guaranty for the excellence of this work.

Sad End of a Telegraph Operator.

On Sunday evening, May 27th, Mr. H. E. Carver, a young telegraph operator in charge of the Western Union Telegraph office at the Coates House, Kansas City, suddenly disappeared. Mention was made in the papers relative to his sudden departure, and as he had left his clothing, baggage, and some money behind him, and had given no notice of his intention to leave the city, it was the general impression that he had been murdered. On inquiry at the ticket office at the Union Depot it was ascertained that Carver had purchased a ticket for St. Louis. It now transpires that the unfortunate man jumped from the passenger train on the North Missouri road, near a station called Perruque, some distance west of St. Charles. He was unhurt when next seen by the ticket agent at St. Peters, who noticed clay upon his clothing, gathered no doubt in his fall in leaping from the moving train. A colored man reports noticing him seated upon the ground making lines upon the earth and talking to himself, but no one has been found who succeeded in holding conversation with him. His body was found afterward, by Mr. Louis Sattler, near St. Peters Station. It was in the woods, headless, and mangled, and partially devoured by a drove of hogs. A pocket-book, containing twenty-three dollars and eighty-three cents, a silver double case watch and chain and a few small articles of jewelry were found upon the body. Further investigations made, subsequently brought to light the following additional facts: Young Carver went to that section of the country last January, and being a good operator, was given a position by Mr. Wood, the Western Union Superintendent. He was a gloomy, sad visaged person, rather misanthropic in his disposition. He was not addicted to drinking or dissipation of any kind, and regular habits. On the day before his sudden departure he appeared to be restless and excited. He appeared to be in great trouble and agitation, and said that he believed all the people in the world had conspired against him to injure him. At times he would stand and mope over the picture of a girl, which at times he seemed to worship. He was evidently insane. His father is an Episcopal minister in Massachusetts, and was at one time rector of Trinity Church, Atchison. They have many friends in Newburgh, New York, and all have our sympathy in this sad affliction.

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Where is the Handsomest Man?

Chicago, Ill., June [illegible].

To the Editor of The Operator. Sir—I beg leave to present the honored name of Adam Warner Beidler, Esq., of the W. U. office, in this city, as a contestant for the honor of the handsomest man in the business. Viola.

Philadelphia, Pa., June [illegible].

Seeing by your valuable paper that Mr. [illegible] Royal, of North Carolina, was advertising himself as the handsomest man in the business, I respectfully present Mr. Charles H. Hall as a worthy competitor. Either Brother John Vollrath, or "Woodsey," of the A. and P. will be my second choice. H.

Mr. Editor—The handsomest man in the business should not be decided upon until your critics have had a look at Mr. Allen Sch[illegible], of [illegible], Pa., who was married last Washington's Birthday. [illegible]

St. Louis, Mo., June [illegible].

If this is in time for your next issue, please present the claims of Prof. M. D. [illegible], [illegible] of W. U., and Proctor of the Telegraph University, at Kansas City, as the handsomest man in the business. Marion [illegible]

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"Only a Woman."—The French government has just conferred the military medal upon a young woman named Mdlle. Dodu, employed in the telegraph office at Pithiviers during the war of 1870. Upon the arrival of the Prussian troops in that town during the month of November, they at once, as was their wont, took possession of the telegraph office and relegated Mdlle. Dodu, the young woman in charge, to a room on the first floor. The wires passed through this room, and Mdlle. Dodu managed to tap them and convey the information to the subprefect. One day a telegram arrived from the Prussian staff at Orleans addressed to Prince Frederick Charles, informing him of the march of a French corps upon Gien, and suggesting the movements to be made in order to surround it. This telegram she took to the subprefect, who made use copies of it for the commander of the French corps, sending each by a different messenger. Two of the messengers were killed, but the third arrived, and the information enabled the French commander to make a timely retreat. The Prussians did not ascertain what had taken place until just before the armistice but for which Mdlle. Dodu might have fared badly. As it was, Prince Frederick Charles, who was at Pithiviers just after the armistice, congratulated Mdlle Dodu upon her courage, and offered her a place in the Prussian telegraph office. This she naturally refused, and, after having been placed in the orders of the day by the Minister of War, was appointed directrice of the telegraph office at Enghien.

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A writer in the London *Telegraphist* insinuates that American operators, when they don't feel like coming down to the office in the morning, just send their cards down, which are placed on a salver on the manager's desk, and that's all there is about it. Ignorance is bliss.

PERSONALS.

Miss C. A. Hamilton is now at Canaan, N. Y.

L. T. Clemans has accepted the managership of the Atlantic and Pacific Company at Lafayette, Ind.

Frank Cummings, of New York city, is presiding over the W. U. summer office at Lebanon Springs, N. Y.

I. H. Farnham, formerly of Richmond, Me., has accepted a position as manager of the Atlantic and Pacific Telegraph Company at Bath, Me.

The late Jesse Mills, during the Centennial Exhibition, sent and received with Mr. Kettles, of Boston, 518 messages between the hours of 8 A. M. and 5 P. M.

S. W. Critchlow, manager I. O. T. office, St. Augustine, Florida, is spending a two week's vacation at Tallahassee. J. McLeod is filling his place temporarily.

LOUISIANA.—Miss Fannie Ingalls is manager, Western Union, at Kenner, La. E. M. Wallace is chief operator and train master, N. O. and M. R. R., at New Orleans; George H. Addis, nights.

Miss Peters, of Pittsburg, Pa., formerly an operator on the Pennsylvania Railroad, was run over by a freight train, June 13th, and lost her arm. At last accounts the lady was likely to recover.

GENEVA, N. Y.—Fred Schneider is agent at Geneva, with Colonel Hill for his assistant. Frank Casper, late of P. and N. Y. R. R., is operator. C. H. Salyelmier is manager of the Western Union uptown office.

Berrien County (Mich.) *Record:* "Woe is the student of telegraphy in a Michigan Central office without permission from the officers, for Mr. Read, superintendent of telegraphing, says they must 'git,' and no more be taken without first obtaining his permission."

The concert and performance of Sullivan's operetta "Trial by Jury," by the choir of St. Augustine's Church, South Boston, May 28th, was a great success. The singing and acting of Miss Guenther was specially admired. Much credit is due to J. F. Dowsley, Western Union Telegraph Company, Revere House, for his able management of the affair.

MASSACHUSETTS.—G. E. Manley, formerly operator, B. and A. R. R., Washington, is now agent and operator at Middlefield, Mass., for the same company. Miss Belle Colson, of Pittsfield, is off on a vacation; she has been relieved temporarily by Miss Hattie Wilcox, of State Line. Miss Mattie Taylor, for the past eight years manager at Becket, Mass., has resigned, and Mr. Cheeseman takes her place. All the operators are sorry to see "M" leave.

TEXAS.—A new wire is being put up between Galveston and Shreveport, and the quad will soon be in operation between Galveston and Houston. Alexander Russell has left the Western Union Galveston office, and joined the Atlantic and Pacific at Cincinnati; J. W. Chatham, late of Bryan, succeeds him. A. J. Taylor has left Galveston on account of sickness, and returned to his home in New York; he has been relieved by Mr. Whittaker from Philadelphia. Miss Anna Palmer, of San Antonio, is now at Galveston. Little Tip McCloskey is alive at Cyrene, Texas.

C. C. C. AND I. RAILWAY.—Samuel Kramer is operator at the freight house, Cleveland; Charles Langdon at the machine shops. At the yards, Cleveland, Mr Stogdill is operator, and Mr Armbuster at the stockyards. William Coomer is at Limedale, Mr. State at Berea, William McKee at Columbia, and Frank Gee at Grafton.

FLORIDA.—J. P. AND M. R. R. AND W. U.—D. J. Crowley has been appointed manager Western Union office, Lake City, *vice* J. E. Zeublin, who has returned to Philadelphia. Messrs. Miller, Story, Harris, Boyce, and Callum comprise the force there. George E. Mundee, I. O. T. office, Palatka, Fla., has returned after a pleasant three weeks' trip to New York and Philadelphia. Thomas C. Carter is at Live Oak, S. A. Howe at Ellaville, W. S. Jordan at Madison, and W. E. Davidson at Drifton, in place of Mr. Wood resigned. W. H. Hoffman, a brother of the well known deaf telegrapher, is operator at Tallahassee; E. B. Jordan at Quincy, and J. P. Wooten at St. Marks.

PHILADELPHIA, A. AND P.—Mr. Soule, who acted as night manager with the Western Union during Mr. Zeublin's absence, has been appointed manager of the Atlantic and Pacific general office, *vice* Mr Maxwell, who has been transferred to the Stock Exchange. Mr. Griffin has been appointed chief operator. Mr. Castner has been transferred from the Stock Exchange to the managership of the Maritime Exchange, and is assisted by Mr. Peters. Mr. Laverty from the Maritime Exchange, has been transferred to the main office. Minor Gross, of the Western Union Continental Hotel, has accepted the managership of the Atlantic and Pacific Company's office at the same place. He has been succeeded by A. Swan, from Pennington, N. J.

PHILADELPHIA W. U.—J. M. Peoples, formerly of Superintendent Merrihew's office, but more recently of the A. D. T. Co., has accepted a position with the Western Union. W. D. Sargent, formerly superintendent A. D. T. Co., goes to Atlantic City, July 1st, to assume the managership of that office. Mr. Bloomhoff left the Western Union service, June 6th, and has accepted a situation with the Atlantic and Pacific Company in New York. Mr. Hartman of the main office, was sent to Pottsville, to assist during the rush consequent on the recent wholesale executions; Messrs. Ziegler and Bigler of Harrisburg, were also on duty there.

BIRTHS.

June 23d, 1877, to E. A. Smith, train dispatcher, Vermont and Massachusetts Division, Fitchburg Railroad, Fitchburg, Mass., a son. Weight ten pounds.

MARRIAGES.

CUMMINS—FRAZER.—At the Manse, Amherstburg, Ontario, June 13th, by the Rev. R. L. Smith, D. W. Cummins late of Milgrove, but now agent C. S. R. Oil City, to Miss Maggie Frazer of Windsor.

C. has the hearty congratulations of all the boys on the line, and our wishes are that success may ever attend him.

DEATHS.

SMITH.—At Goodman, Miss., June 17th, 1877, Thomas A. Smith, aged 56 years.

CARVER.—Near St. Peters, Mo., H. E. Carver, late of the Western Union Telegraph Company.

BURNS.—At Philadelphia, June 15th, 1877, Richard Burns, late of the Western Union Telegraph Company, of consumption.

Mr. Smith was one of the oldest operators in the business. He built some of the first telegraph lines in Mississippi, and at the time of his death he had been nineteen years in the same office. We have received several letters from that part of the country, and the sorrowful sentiment seems to be general among his late co-workers.

BAILEY.—At San José, Cal., May 15th, 1877, Lewis Homer, only child of Mr. and Mrs. Julius R. Bailey, aged three years two months and twenty-one days. Mr. Bailey is the manager of the Western Union office at San José. He has the sympathy of his many friends in his sad bereavement. The San Jose *Mercury* of May 16th, speaks feelingly and sadly of the little departed one, and we are sorry that an unusual press of matter prevents us from republishing the article.

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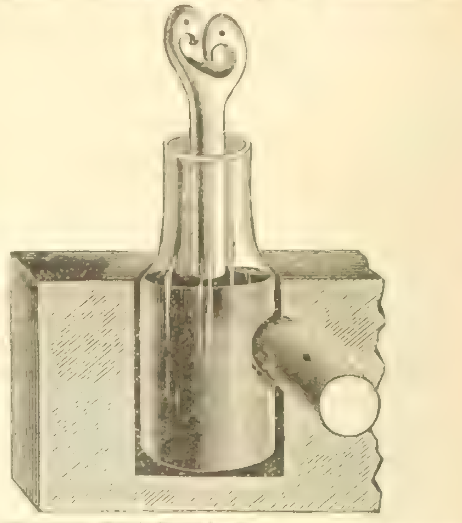

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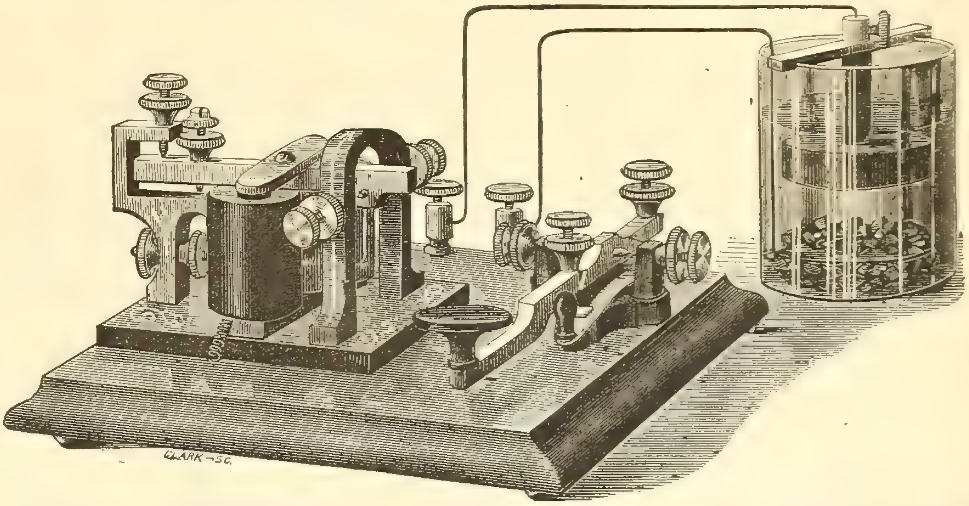

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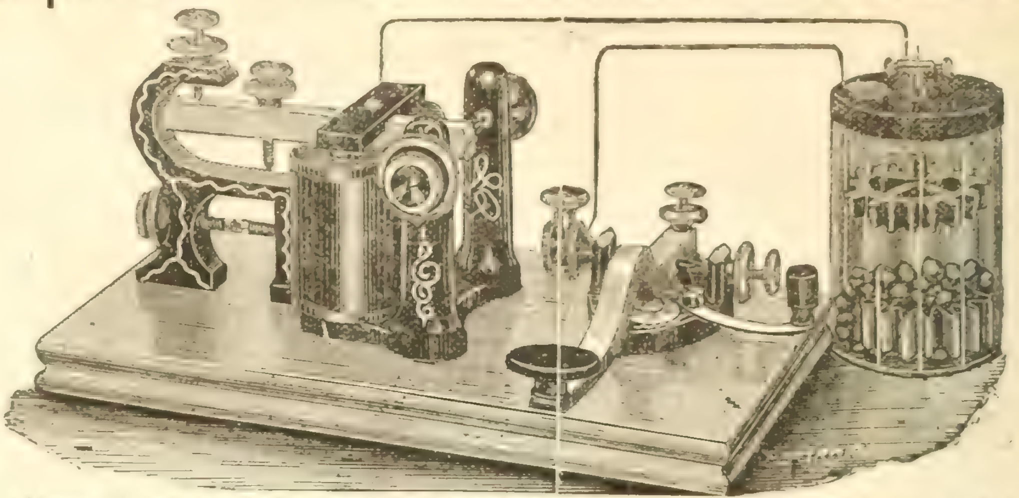

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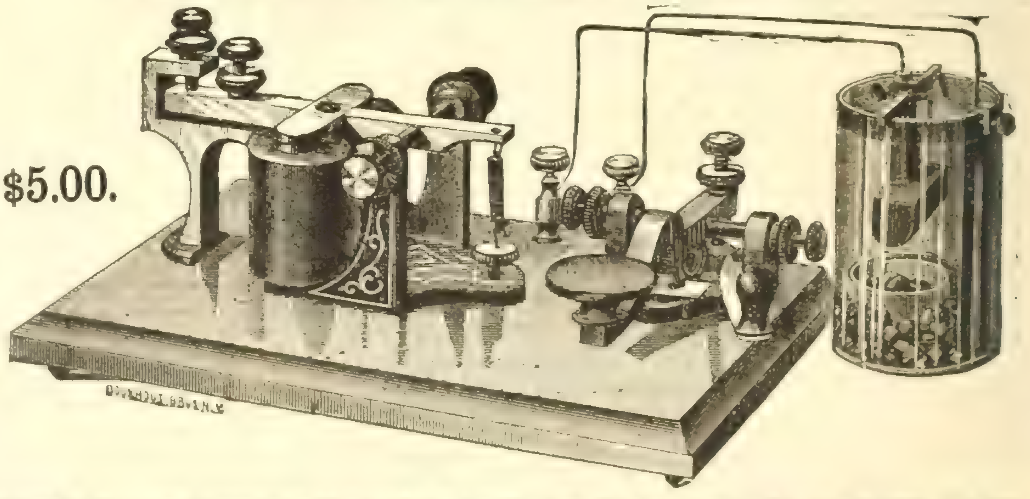

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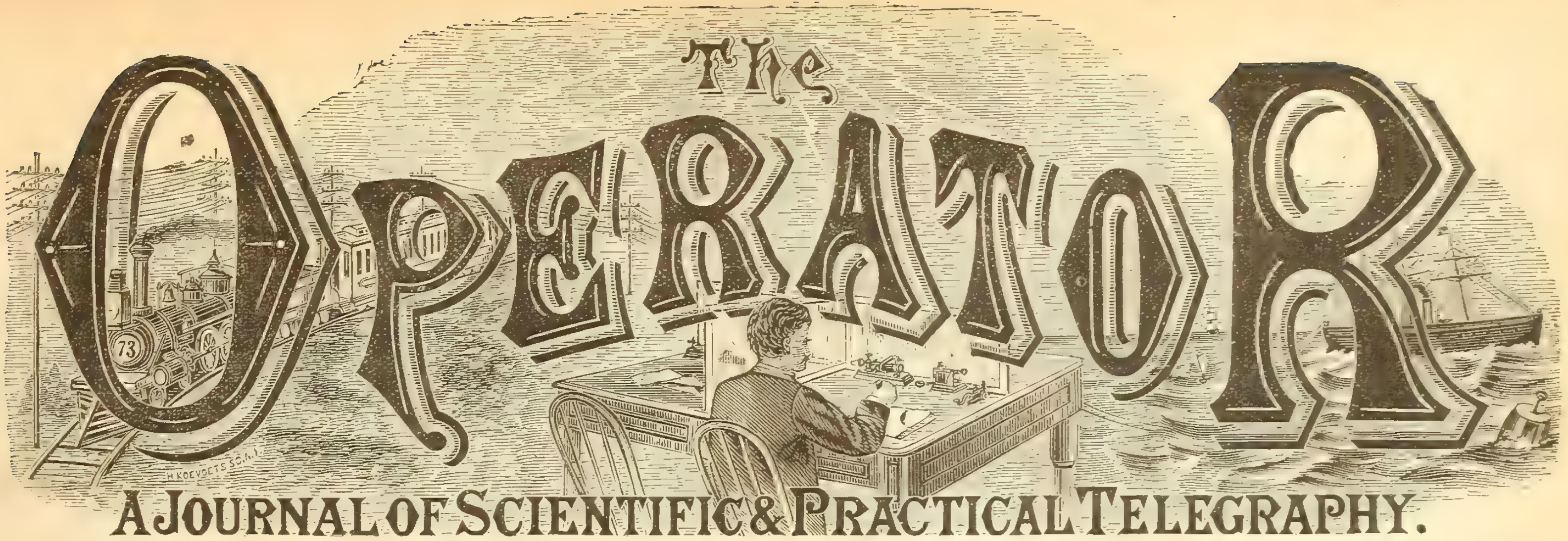

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VOL. VII. NEW YORK, JULY 15, 1877. No. 10

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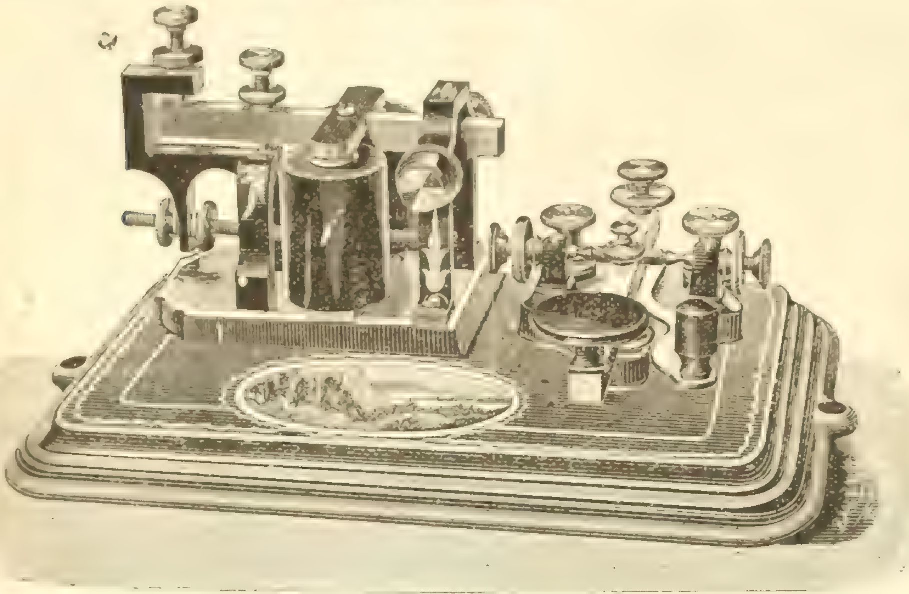

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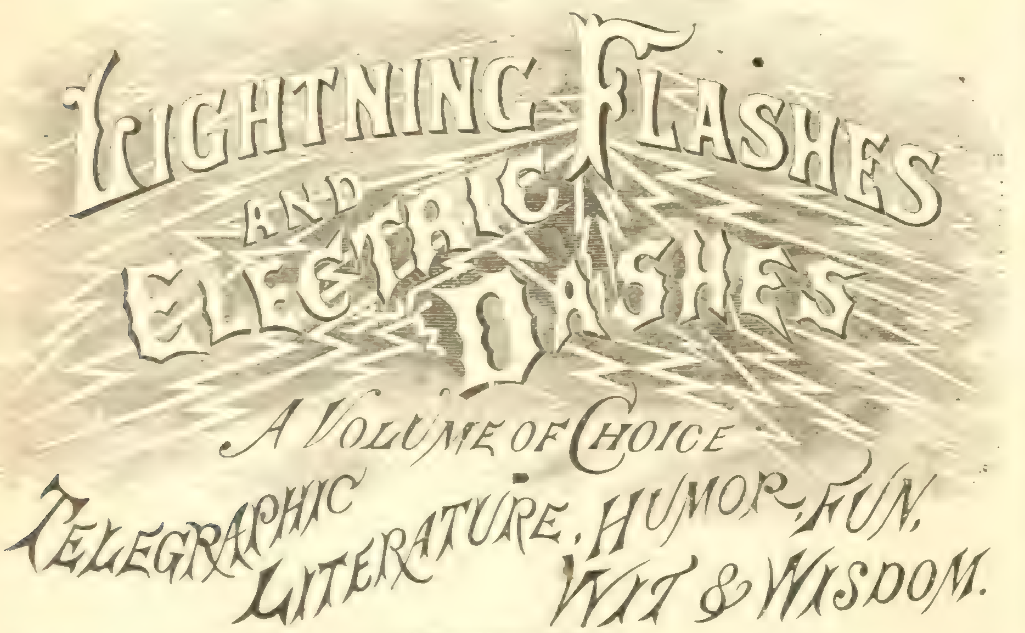

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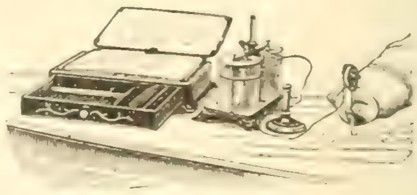

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Volume VII. **Whole No. 82.**

The Swing.

Now in the sun and now in the shade,
  Floats fair Adelaide, smiling and swinging;
While we lie in the cool green glade,
  Filling the air with our laughter ringing.

Up in the sky and down to the earth,
  Backward and forward the swing is glancing;
All is sunshine and joy and mirth,
  While gaily the rosy hours are dancing.

Ah, fair Adelaide, so in life,
  Up and down and from joy to sorrow;
The world looks on with envy rife,
  Nor dreams that the swing may break to-morrow.

From life to death the pendulum swings,
  Time with his scythe the flowrets mowing;
Enjoy the day while youth's laughter rings,
  And be gay while yet the swing is going.

Belgravia.

◆

Marion Scudder.

A MYSTERY.

BY JOHN OAKUM.

I am what the world calls "an oldish fellow," but the boy never dies out of some natures, and mine is such an one. I am as fond of reading sentimental stories, pretty little poems, and sad, weird novels; of listening to the morning songs of the birds and of plucking wild flowers in the fields as I was years ago, when in the heyday of my youth I was, like my fellows, more or less romantic. Albeit the winters have drifted "like flakes of snow, and the summers like buds between," until I sometimes feel, with Ruskin, that it is a little saddening to watch the golden sunsets, the sun goes down so fast, yet am I young in all but outward form and semblance. I make little pilgrimages when the summer has fled, to the no great neglect of my legal business, to watch the changing colors of the forest trees, and sometimes, once in a few years, I visit New York, and pass a sunny autumn day at Central Park. No words at the command of a superannuated old lawyer, like the writer, can properly describe the beauties of that marvel of city gardening, when the frost has put its imprint on the myriad of trees and shrubs. A lovely spot, to all admirers of art in nature, at any time, Central Park becomes indescribably captivating when its plumage has changed from the emerald of spring and summer, and has assumed the numberless tints of the rainbow. To wander on, heedless of whither my footsteps tend, and note this specimen of gorgeous scarlet, that clump of golden leaves and the ever recurring browns, silvers, purples and yellows, is my delight. And when the sun shines brightly and the birds sing their melancholy songs—it always seems to me as if they sing in unison with nature; merrily when she is reviving, serenely and with mellowness in the days of her summer opulence, and sadly in the hours of her decay—I feel as if I had come into possession of my Spanish castles, and in heart, at least, I am a boy again.

I recall, at this moment, a visit made to Central Park two years ago. I am not positive whether it was in the last days of October, or in the first of November. Suffice it that the weather was most beautiful. I had strolled about until I was weary and footsore, and had stopped to rest on the bridge overlooking the lake. As you will remember, this bridge is reached from the Mall by crossing the Drive, and one may loiter there and see all those who pass in carriages. There were but few people visible as I leaned against the rail, and surveyed the lovely scene about me. The sun was sinking rapidly below a bank of gray, cold looking clouds, a chilling wind was springing up, and I was about buttoning my coat more firmly around me and setting out for the city, when I noticed a rather distinguished looking gentleman down by the lake. He was, perhaps, thirty-five years of age, and was amusing himself by throwing pebbles out into the wrinkled waters. He was a handsome fellow, smoothly shaven and tastefully dressed, though something about the cut of his attire persuaded me that it was not of American manufacture. I set him down in my mind as an English tourist, and as he was now coming toward me I prepared to scrutinize him more closely. Just as he was mounting the steps which lead to where I was standing the rumbling of wheels diverted my attention, and I turned my gaze in the opposite direction. Presently, a lady and gentleman came dashing by behind a pair of high stepping horses. From the instant the carriage came within sight until it disappeared my eyes rested on the lady. To say that she was beautiful beyond the power of this hand to express, scarcely dismisses the subject. I never saw, to my recollection, so faultless a pair of shoulders. Her head, too, was a marvel of loveliness. There was a poise about it which enhanced the sweetness of a face reminding me of Lucca's, and the rich locks of hair which escaped from control with the rapid pace, were as those of Dante's Beatrice—like sheathes of gathered sunshine. I stood spellbound, as if an angel had passed my way. For a moment I scarcely breathed, counting it wrong to inhale the air, hallowed as I thought it, by a recent presence bordering on the divine.

"Lovely woman, isn't she?" came from beside me, and as soon as I could recover my equanimity I turned, and meeting the eyes of the pebble caster, I replied:

"Indeed, sir, you may well say so. Like most men of my years, I have my sweet and bitter memories; I have castles of gold and cedar and immense domains in dreamland, through which flow silver rivers. My castles overlook lawns of perennial green, and the air is fragrant with the incense of orange blossoms and myrrh. Sitting at my windows at eventide, I see, in the luminous atmosphere, faces of wondrous beauty, but none fairer nor more angelic than her's. A lovely woman, most assuredly."

"I suppose, of course, you know her?" he returned.

"I haven't that honor. I wish I had," I said. "Do you know her?" I inquired.

My companion gave a long whistle, and finally answered abruptly: "Yes, I *do* know her; and she has a history, too; but it is not much known, nor of particular interest to strangers. Let it pass. But," he added, in a brisker vein, "I am surprised, if you are a New Yorker, that you do not know the brilliant Mrs. Vaughn."

"I am not a New Yorker," I rejoined. "I live in Boston, and have never heard of Mrs. Vaughn, I assure you."

"Well, you have of her husband, surely," my entertaining friend resumed. "She is the wife of Howard Vaughn, the capitalist—Vaughn, Giddings and Gluck, the Broad Street bankers. Vaughn is a fine fellow, I think, though I have abundant reason to hate him cordially. But I respect the man and ignore my personal animosity. He likes good horses, good wine, and good living, but he is a man of cultivation, also. You may remember him as the companion of Colonel Charles S. Bulkley, the explorer and engineer sent out to build an overland line of telegraph from San Francisco to St. Petersburg, some years ago, and which was abandoned with the unexpected success of the second Atlantic cable. Vaughn afterward wrote a book reciting his experiences in British America—'Snow Shoes and Sledges,' I think was its title. Oh, yes! he is a clever fellow; he writes articles for the daily papers on finance; essays on social and literary themes for the magazines, and a poem now and then, so sweet and pathetic that you would imagine its author to be some pastoral queen who had never wandered from the shaded lanes and quiet forests of her country home long enough to even hear the echo of a city's hum and bustle."

My companion subsided, and as we had begun walking while he was speaking, he fell to cutting at the bushes with his cane, and seemed to be preoccupied. I had become greatly interested in his remarks, and expressing my thanks for the confidences he had communicated, I intimated that I should be glad to know what reasons he had for hating so gifted a man as Mr. Vaughn. But my words seemed to be utterly lost upon him. Evidently his mind was elsewhere. We walked on in silence for some minutes, when my friend asked abruptly:

"Did you notice Vaughn at all?"

I replied that I did not; that my attention was so much engrossed by the lady and her marvellous beauty that I had not bestowed so much as a glance on her husband.

"I am sorry," continued my companion, "that you did not note him more closely. He is a wonderful man, possessed of a face which once seen can never be forgotten. Born in the country, he has a nature so informed by the idyllic surroundings of his childhood, that his manner is almost womanly in its sweetness. Contact with the world in later years has polished him outwardly to the last degree, so that take him all in all, he is really a most remarkable specimen of simplicity, worldly wisdom, large heartedness, culture and affection delightfully blended."

We had now reached the Exit, and without ceremony my friend called a coupe and plunged into it. I was moving off not a little perplexed at all I had heard and his unceremonious manner of quitting me, and had just signaled a Fourth Avenue car, when a carriage stopped beside me, and a voice I recognized at once, said:

"I suppose you would like to hear her history, since you think Mrs. Vaughn so beautiful?"

To my answer in the affirmative, the voice continued: "Well, come and dine with me to-morrow night, at the Clarendon, and I will tell you about her."

And a hand was put forth which grasped mine cordially, as the speaker concluded: "I somehow took a fancy to you from the first, and over our wine and cigars to-morrow evening, I will tell you a story so strange, inexplicable, and sad, that you will have something to think of for a long time. Be at the Clarendon at seven o'clock sharp, and ask for Conrad Kirschbaum—pshaw! not a card with me, just my luck—and you shall know all."

I readily assented, and my new acquaintance falling back among the cushions with a sigh, signalled wearily to his driver to proceed, and the carriage passed rapidly down Fifth Avenue, quickly disappearing around a corner.

I dined with Kirschbaum the next evening according to engagement. After dinner he told me the following singular story: He was the son of the Rev. Conrad Kirschbaum, deceased, of Allentown, Pa. In 1870 he had fallen a prey to a malarial fever, and went abroad to recuperate his health. In Paris he met Miss Marion Scudder, of Albany; they fell in love, became engaged, and were to be married on their return to America. While they were deep in their plans for future bliss, the Commune revolted. The siege of Paris began and progressed without eliciting their attention until one day, when it was too late to leave the city by the usual methods of conveyance, they awoke to a realization that they were prisoners in a beleaguered city. From this point I will let Kirschbaum tell his own story:

"Oh! how I loved that girl—how I love her still. But that is not to the purpose. There was only one way out of the city—by balloon. It was with no small difficulty that I obtained Marion's consent to leave by that means, but she reluctantly complied at last. Then I had no end of trouble about getting a balloon, and ran the imminent risk of being shot in making the start. In a few days, however, all was ready. I was to meet Marion at her hotel at seven o'clock in the evening, and from thence we hoped to quit Paris before night had set in. As I was pacing the floor at my lodgings, she came to me about six o'clock—an hour before the time at which I had agreed to call for her. I remonstrated with her for jeopardizing her life by coming out of doors before nightfall and without an escort, but she averred that she felt so wretched away from me in the great danger which threatened us and she seemed so dependent on me that I ceased my chiding. We left my lodgings about fifteen minutes before seven, and between seven and eight o'clock we stepped on board the balloon, which, when the word was given, shot up into the air and rose to a great height. Have you ever done any ballooning? No? Well, it is a queer sensation which a man feels on his first trip. The firm earth seems to drop from beneath you, the people and objects below appear to be rapidly falling into space. It is impossible at first to realize that you are rising. It was a moonlight night, and we could see that we were passing over the suburbs of Paris. [illegible] the vast extent of the city. [illegible] trees, houses, and fields, swept past in such rapid succession that I decided that I must shortly think about making a landing. On which side of the city I was, I could not determine, but I knew that at the terrific rate of speed at which we were going, I must descend before long. Faster and faster the now indistinguishable objects below swept past us when suddenly the report of a rifle startled me. Breaking from Marion, whose arms were around me, and whose head rested upon my shoulder, I peered over the side of the car, but could discover nothing. We were being fired at, I judged, and so with a view to rising higher, and thus placing ourselves out of range, I began to empty the bags of ballast. I now abandoned all thought of descending. My only hope of safety was to go higher, higher. The balloon seemed to shoot up a limitless distance, as the sand ran out. The moon was so low on the horizon that I knew that it would soon sink and leave us in total darkness and indescribable desolation, but safe at all events from hostile bullets. The darkness and desolation followed very shortly afterward, and I resumed my place at Marion's side. She was brave and calm, and seated up there in boundless space, knowing not whither we went, nor at what moment we might be plunged into the yawning abyss of chaos below us, I felt to the full how dearly I loved her, and how little I deserved her love. A man realizes his utter worthlessness at such times, he feels how completely his poor mortal shell is in the grasp of God; how easily it is to crush him out of existence, and how mean, narrow, and inconsequential is all human effort. In the silence of that night, and in the [presence of the majestic conditions about us, Marion and I found voice to talk of our love and our future, as we had never talked before—as no lovers had ever talked before, perhaps. We spoke low, and with something of the timidity of children when the lightning darts through the skies, accompanied by the reverberations of deafening peals of thunder. It is in such circumstances, sir, no matter how self dependent a man may be by nature, that he speaks like a sick girl, and qualifies his declarations with "if it please God," "if heaven approves," and similar phrases of deference to the Supreme Being, whom he feels is very near to him. And thus through the night we sat motionless, and talked until Marion grew silent and finally dropped asleep in my arms like a tired child upon its mother's breast. I sat supporting her fair head for perhaps an hour or more, when the first sound that I had heard, except our subdued voices, since the rifle shot as we soared over the Paris fortifications, fell upon my ears. It was a plashing noise suggestive of water below us, and my heart stopped beating. I listened, and again I heard the complaining voices of the waves. Removing Marion from my arms and placing her in as comfortable a position as possible, I went and looked over the side of the car, but I could see nothing. A dull opaque gloom, in which nothing whatever was distinguishable, was all that met my eager gaze. But after a time I discovered something like motion. Whether it was the rolling clouds or the movement of waves I could not determine. I went back to where Marion was reclining. She was still sleeping soundly, and, kissing her softly, I enveloped her more snugly in the wraps we had brought, and returned to watch developments. As I gazed the sounds seemed to come nearer and nearer, and at length the moving objects beneath became more distinctly revealed in the increasing dawn which was apparently breaking. All at once I beheld the movement beneath and around me [illegible] and [illegible], and in my ears sounded the [illegible] of angry waters—the surging, foaming, seething billows of the sea! I suddenly recognized, then, that I had been gradually descending by reason of the percolation of the gas, and so I began again to cast out ballast. This had the desired effect, and we rapidly ascended. No, not *we*. For when I returned to where I had left Marion sleeping, *she was gone*.

[To be concluded in our next.]

Fast Work.

In consequence of the loss of the A and P wires west of Columbus by the heavy gale on Monday last, on Tuesday a portion of the business from the East for the West, passed through Newark Depot, B. & O. R. R. Co.'s office. Six hundred and twenty-three A.P., and two hundred and twenty-one Railroad messages were exchanged. This work was done by Mr. J. C. Hankinson, Division Operator, and Mr. W. W. Carney, his assistant, in eight hours and forty minutes, on five wires, making an average for each [illegible], 50 messages per hour, Mr. Hankinson receiving at one time 57 messages in 55 minutes. Considering the general length of railroad messages, we think this excellent service, and Superintendent [illegible] ought to feel proud of two such able men.

NEWARK, O., June 27th.

Letters from Europe.

My last letter was written from Cork, June 13th. That morning I took the train for Blarney, visited the famous castle, and kissed the Blarney stone! I very nearly succeeded in breaking my back in the latter operation, but you needn't say anything about that. The castle is situated about six miles from Cork. One part of it, they told me, was built in the year 700, the remainder in 1400. The ruins show that it was a very strong castle for that day and generation, the walls being fourteen feet thick. The much talked-of Blarney Stone, a kiss of which is supposed to impart the gift of eloquence, is built in the wall near the top of the castle, perhaps fifty or sixty feet from the ground. It is incased in iron bands, and to kiss it you must get down on your knees, hold on to the iron and bend your body almost double, running the risk of being precipitated headlong to the ground. Of course it's a great thing to be able to say that you kissed the Blarney Stone, and all that; but between you and me—and I mention it in great confidence, and at the risk of ruining my reputation as a lover of old traditions—the sensation isn't half as sweet or nice as that experienced in performing the same ceremony when "the person of the second part" is flesh and blood like yourself—of the opposite sex—and handsome. But pardon the digression. The country surrounding the castle is very picturesque and beautiful, and the view from the top simply delightful.

Leaving Blarney, I took the train to Mallow, and thence to Killarney. On this broad globe of ours there is not, perhaps, more "wild, gloomy, vast, magnificently grand" scenery than is found

"By Killarney's lakes and fells,
Beauteous bays and winding dells"

Words utterly fail to convey even an idea of the grandeur of the natural scenery in the neighborhood of Killarney, or of the surpassing beauty of the now world renowned lakes—clear as crystal and nestling so cozily at the base of majestic mountains. I hired a small boat, with a boatman and guide, and spent a delightful day on the lakes. There are three of them. The size of the lower one is 7 miles by 4½, the middle 2½ by 1, and the upper 3 by 1. The lower lake is 720 feet deep, the others not so much. There are 27 very beautiful little islands dotted over the surface of the much admired and really magnificent lower lake, only one, called Devil's Island, on the middle, and seven on the upper. Between the middle and upper lakes is that beautiful spot, famed in song, and the especial favorite of Sir Walter Scott, Miss Edgeworth, and others, called the Meeting of the Waters. It is a magnificent place. "There's not in the wide world a valley so fair." Right here is also the Oldway Bridge, the oldest structure ot the kind in Ireland. The upper lake, just beyond, is particularly handsome. Completely ensconced in "the wild pomp of mountain majesty," the scenery seems all the more romantic and beautiful. There is also a splendid echo there. In one place you can hear the sound of your voice reverberating from one hill to another until, starting from the one in front, it strikes another at your left, and finally resounds clearly and distinctly from the mountain behind. The sensation produced is as strange and wonderful as it is delightful. I saw the Bachelor's Well, said to contain the coldest water in Ireland. Appropriately enough, it flows into the Devil's Punchbowl. I presume the old man prefers "a little ice in his!" It is said that the unmarried of either sex who drink of the well will be certain of entering the matrimonial state within the following twelve months. I did not indulge, lest it *might* have that disastrous effect! The lakes are the property of the Earl of Kenmare. Yew, holly, oak and other trees grow along the lakes in great abundance, and the hills in the neighborhood are noted for wild deer. Sir Maurice O'Connell, a nephew of the great Daniel's, lives within a stone's throw of the lakes.

On Saturday morning I took the train for Dublin, arriving at half-past one. During that afternoon and the following day I visited the several places of note in the city and vicinity, including Phœnix Park. The latter, though of course much smaller, bears the same relation to Dublin that Central Park does to New York. It is generally crowded, especially on Sunday, and what I thought very strange, visitors on that sacred day are permitted to wrestle and indulge in other athletic feats, which would not be tolerated even in wicked New York. On Monday morning I presented myself for admission to visit the head Postal Telegraph Office. There was considerable red tape about it, but having finally obtained an order over the signature of G. C. Cornwall, Secretary, I was admitted, and the Assistant Superintendent, Mr P. F. Duffy, delegated to conduct me through the office, and furnish any information I might desire. It isn't a handsome office, at all. In fact, it's rather a dingy affair, in the (of course) top room of a cheerless building, with a low, consumptive-looking roof, through the windows of which in summer the sun beats persistently in, and where in stormy weather the sky lights must be kept closed, transforming the place into a veritable sweat-box. The men have only eight hours duty a day, however, and look rosy and happy. The ladies, ditto. Dublin, you may not be aware, is noted for its handsome ladies. The telegraph office boasts its full quota. The type of beauty here, however, is diametrically opposite to what we find in New York. There, the figure is slender, the features sharp, and the face rather thin and pale; but in Dublin the figure is plump, the face round and fat, and the cheeks as red as a full blown rose—altogether the very picture of robust health.

There is one—I should judge very pleasant—custom in the offices here. The ladies and gentlemen sit side by side at their instruments—not huddled up in one corner, as in the New York main office. As I passed along under the efficient guidance of Mr. Duffy, I noticed one handsome fellow, with a pleasant, open countenance and high, noble forehead, sitting at one of the busy wires. Beside him sat a remarkably pretty girl, the personification of neatness and good humor; neither of the wires appeared to be busy at the moment. He had his left arm on the back of his own chair, and was gazing complacently into the lady's handsome eyes. He may have been tenderly whispering some such important information as: "Every moment I'm from your sight, the heart within my bosom moans like a tender infant in its cradle, whose nurse has left it," or merely been making some commonplace and highly unsentimental remark about answering a call, or fixing the check of a message. There was a world of tenderness in her large, expressive eyes, as she glanced up in a coy and bashful manner in his face, and I could not help thinking what a precious row it would occasion, should the worthy manager at 197 discover a similar state of affairs in that model office! Why, I suppose half the force might immediately consider themselves suspended, while the reason of a number of Western Union officials would positively tremble in the balance over the startling discovery.

There are 90 males and 63 female operators, besides 27 office boys, in the main office. Including the branches, 126 females and 105 male telegraphers find employment in Dublin, though the authorized staff is two less—229. Business is received from the branch offices entirely by pneumatic tubes, of which there are five. I had the privilege of examining the books, and found that the number of commercial messages handled at the main office was some days less than 5,000, and on others more than 6,000. Perhaps 5,500 would be a fair average. Well, now, suppose we leave out 13 operators to receive the two hundred press dispatches, which is the daily average. Each of the messages contain from 60 to 2,000 words apiece—the other 140 operators each handle only an average of 39 messages a day, which does not seem very hard work in the eyes of American operators. I made a note of the delays on an average day's business, and found that 31 per cent. of the messages were got off under five minutes, 76 per cent. under ten, and 23 per cent. over ten.

Two of the Dublin morning papers, the *Irish Times*, and the *Freeman's Journal*, have each the use of a special London wire between the hours of 6 P. M. and 5 A. M., over which is transmitted all the very latest metropolitan news and gossip. Each of these enterprising sheets pays £1,000 a year for the privilege, and provides its own operators. They pride themselves on having one or two rather "immediate" male, and several very good lady operators in Dublin. Their best man has been known to send fifty words a minute with abbreviations, and forty without, and it is said, has sent as many as 60 messages in an hour, averaging from 15 to 18 words each. I noticed his style. He certainly sends smoothly and gracefully. The best of the men average about 40 messages an hour, the ladies, 30. Mr. George Cooke, the superintendent or manager, has a salary of £250 a year; the assistant superintendent, £230, the chief operators or clerks in charge, from £100 to £190. The operators' pay ranges from 11s. to 21s., 22s. to 28s., 29s. to 35s., and 36s. to 44s., according to the class. There are 76 circuits in the office, and 49 sounders, 8 duplex, 1 Bain, 3 wheatstone, 5 single needle, and 10 A. B. C. instruments. The hours of duty of each of the operators are changed every month. There are no regular night men, each operator taking a night trick in turn. The ladies do not work nights. Those who work nights, are allowed three weeks vacation every year, those who work only days, two weeks. Assistant Superintendent Duffy has my cordial thanks for courtesies, and the cheerfulness with which he furnished the information given above. Mr. Duffy is held in high regard over here both as a gentleman, a Postal Telegraph official, and an efficient electrician, and from what I saw, I should say very deservedly so.

The weather over here is quite cold, with considerable rain. Blankets are a necessity at night, and overcoats at a premium. I am having a pleasant time, and enjoying my vacation immensely, notwithstanding the rather damp weather. W. J. J.

The Thorsdale Telegraphs.

"What has become of Kettridge? I am so thankful you did not have to hurt him."

"Kettridge? He is at the depot, as quiet as a lamb now. Poor devil, I must have choked him very hard; he was so nearly dead that they were afraid to move him."

"Have you been nursing him?"

"Pretty rough nursing, if you call holding him down by main force, off and on for the last twenty-four hours, nursing! The doctor came here this morning from Smoilersville, and chloral and morphine have at last quieted him. How to manage the sale of alcoholic stimulants in Thor, I must confess, has at times caused me sleepless nights."

"Attention, now, if you please, Mr. Thor. You will allow me to telegraph to Mr. Watkins that you will receive the deputation, and you will let me ask him to send some one to take my place here for to-day. The lady at Smoilersville would, I have no doubt, do the work willingly."

"She shall do no such thing," he cried, now, rising in a towering rage. "If you really are in earnest, I can get some one from a station below to take your place. Are you not well?" he inquired.

"Rather an inclination to a headache; I am not used to having them. They took the best care of me, however, at my house."

"If you had remained quietly at home yesterday afternoon, and not gone strolling over the country, and scaling Thor's Rock, and getting yourself chilled in the evening air, you would have been quite well to-day."

"Does the authority of the office, Mr. Thor, extend so far as to place limits on what amount of recreation I may choose to indulge in?" I said, quite angrily.

He opened his eyes very wide, but said nothing, and went to a key and commenced working it. "It is done," he said, "and here comes a reply, which informs us that your substitute for to-morrow will be here. In fact, Miss Brown, I could get all the young men on the line to work for you, without salary."

"Pray, Mr. Thor, do not irritate me. I will now send your message to Mr. Watkins."

"Do what you please; for I perceive that I am in despotic hands."

"Will this do? 'Will be pleased to receive the deputation; there, that is all."

"Pleased! No, I am not pleased. But who is going to write my speech for me? The long-winded mayor is sure to get off some interminable twaddle. I solemnly declare that had I foreseen what an egregious ass I shall now be forced to make of myself, I would have let the train go to perdition."

"Mr. Thor," I replied, "all positions in life have their responsibilities."

"Oh! it is all very well for you to say so," answered Mr. Thor, maliciously.

I was determined not to be annoyed at whatever he said, now, so I thought I would take another tack. "What is Thorsdale, or Thor?" I asked. "A mean, poor, wretched place, as far as man's hands have wrought it. There is an unpainted depot, and a ramshackle telegraph station, both of them pictures of decay and neglect. What might Thor be, situated as it is on the border of a glorious lake, in the midst of rich pastures, with a grand river flowing through it? Thor might be a centre of trade and commerce, a second Asgard." Mr. Thor, who had heretofore been rather an uninterested audience, at the mention of my mythical capital suddenly clapped his hands, and was now all eyes and ears. "Chance," I continued, "may have something to do with the founding of a city. Some men may wait for a storm to fell the trees which may block the way of the passing emigrant train, but in other cases only time and tide, opportunity and perseverance altogether may effect this noble end. Can you see nothing in the occurrence of the other day?" Up to this point I had hardly believed very much in what I said, and found myself inclined to listen to the echo of my own words; but when I looked at Mr. Thor, who seemed to hang on every word I uttered with breathless anxiety, I must confess I felt an unknown pleasure in seeing that I had produced some effect, and I became suddenly elated with my power, and warmed up to my subject. Now I was in dead earnest, and believed in what I said. "Mr. Thor," I continued, "you did a brave action, and such action must always bring its own reward—"

"Bad champagne, a yellow omnibus with six spavined horses, a brass band, and a subscription to be received at the office of the *Sentinel*," said Mr. Thor, rudely interrupting.

I felt like leaving off right there, but I would not give in. "I will suffer no such irrelevant remarks. Perhaps a hundred people owe their lives to you. Talk to the directors; show them the advantages of Thorsdale; they are bound to listen to you, and may favor your views. You have an idea—a most ambitious one, it is true—of making Thorsdale, if not a city, at least a town. You have brooded over it so long that by a not unnatural process of the mind your ideas of how to give life to Thorsdale have partaken too much of the character of a dream. Think of Thor as possible, not with triumphal arches, art galleries, or theatres, but simply as Thor with a single street, even if it be a straggling one at that. Make but a commencement, and the future of Thor may be only a question of time."

"By heavens, Miss Brown, cried Mr. Thor, coming toward me with both his hands outstretched, "you have struck the chord. A single idea, far too big for me, has lodged in this poor brain of mine until it has crowded out all the lesser methods for accomplishing it. I thank you for what you have said, from the very bottom of my heart, and I swear to you I will act on it. I will not detain you any longer; I must make the best excuse I can for your absence, though I should feel much less awkward could you stay with me. I am selfish enough to have forgotten, however, your headache. I suppose I have, as usual, been very coarse and inconsiderate in regard to the shock you may have received on Tuesday. Men rarely appreciate those more delicate vibrations which sometimes shatter the weaker vases."

"Il ne faut pas brutaliser la machine," I said, to myself rather than to him.

"Oliver Wendell Holmes never made an apter quotation, nor one which is as little respected," replied Mr. Thor, musingly. I blushed crimson, I suppose, as I had not imagined he would understand me.

"Just one thing more," Mr. Thor." Here I hesitated and felt afraid I was going too far, but added, "I am about taking a liberty with you. I would most respectfully suggest that when you talk to these railroad magnates, you drop all allusions to berserkers and vikings and jarls, battle-shields and sea horses." He seemed to wince when I said this, but I continued remorselessly, "What do these men know or care about Eddas, or Gyda, or Snorro? Talk cattle, grain, lumber, and coal to them. No one knows better than you do what are the capabilities of Thorsdale, geographically and commercially considered. Speak to them about dollars and cents, and not myths and fables. To come down to the essential, if they only establish a grain depot here, that would be something."

Mr Thor looked at me wistfully, and seemed a trifle shocked, but I had reason to suppose that my words had made some impression on him.

"So be it, in God's name," he replied, in a subdued way. "It is almost time for the train now. You have not taken my hand yet, to show you have forgiven my abruptness. The fact is, Miss Brown, when the general superintendent informed me that he had sent a young lady here, I was terrible opposed to it. All female operators embodied in my mind the peculiarities of the Smoilersville young lady."

"What fault can you find with her? If I am to stay here, I should want one of my sex to prattle with. A crochet pattern sent over the wires would be charming. But here comes a message precisely from the lady in question," and I read off for him as follows: "Glorious deeds should be welcomed not only with the laurel crown, but with outbursts of song. The Smoilersville German Silver Orpheons have offered their services, and will join the deputation.—E."

"I knew it," cried Mr. Thor, "this is the last straw which breaks the camel's back. If Thor ever is built, any member of an amateur band given to abusing wind-instruments shall be driven from the place with stripes."

"Good-by, Mr. Thor, I said, and shaking hands with him I left the office.

To be Continued.

Echoes from 197.

Finnegan will be eighty-six next Christmas.

The boys have dubbed "Yz" the Majilton, because he's such a "kicker."

Chauncey Raymond, who has been ill for some time, returned to work last week.

The latest additions to the night force are Messrs. Ahearn, Embree, McManus, Wright and Chamberlain.

Mr. Bagley will not go to Cozzen's Hotel this summer, as previously reported. He will take a two months' vacation for his health instead.

Walter Phillips (John Oakum), has been enjoying a brief respite from his labors by a fortnight's trip to Niagara Falls, Montreal, and the White Mountains.

John Brant is six feet high, and weighs two hundred pounds. (This is for the benefit of the Boston young lady who believed him to be a consumptive stripling of sixteen).

We are glad to hear that R. M. McMeney has returned to the Western Union after his absence for nearly a year. Bob is a fine fellow, and a good operator.

Charles Howlett, who has been rusticating for some weeks in Southern Indiana, returns to us again greatly improved to all appearance by his long vacation.

Mr. James Calahan is in daily receipt of letters from all over the country complimenting his artistic skill as evidenced in "Lightning Flashes," and his picture of the telephone.

Fred Wilcox has been transferred from the Boston quad to the Long Branch duplex. Freddie is a fine little operator, and will doubtless make it warm for the New York boys temporarily residing at the Branch.

Theodore Taylor has been transferred to the Newport wire, which he will work during the rush of summer business. His place on the Continental Hotel, Philadelphia wire, is filled by Mr. Jackson formerly of the Boston quad.

Robert Morton, whom we all miss greatly, has resigned his position in the cable department, and accepted the managership of the Atlantic and Pacific companies, Richmond, (Va.) office. Bob has the best wishes of a large circle of friends.

Harry Henry, who "does" the New England press, nights, is spending his vacation in the east. His place is very acceptably filled by Fred. N. Cooke, of Hartford, who, it as rapid as his brother, "Ed," is certainly "soon" enough to satisfy the most ambitious.

We are informed that Ed Leloup, well known throughout the entire South, has resigned his position with the Western Union, in New Orleans, to accept the management of the Atlantic and Pacific, which company is rapidly extending its wires toward that city.

Mr. Leloup has been the successive manager of all the opposition companies ever erected in New Orleans. In 1872 he was manager of the P. and A. Two years later he had charge of the S. and A., and now he fills a similar position for the Atlantic and Pacific. He is a native of the South—born and reared in Mobile—is a prominent society man, and has a valuable acquaintance among the solid business men of the city. The appointment is in every respect an excellent one, and we congratulate Mr. Leloup on his triumph over so many worthy competitors for the position.

* * *

THE Assistant Commissioner of Patents has decided the long pending interference case of George M. Phelps, of Brooklyn, N. Y., vs. E. B. Welch, of Cambridge, Mass., assignee of the patent of Charles L. Anders, for an "electric printing telegraph," which is extensively used by gold and stock boards, etc. The decision is in favor of the validity of the Anders patent.

THE Signal Service steamer "[illegible]," engaged in constructing the North Carolina Coast Signal Telegraph, sank during a storm, at Norfolk, Va., on the night of the 11th inst.

THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

July 15th, 1877.

DURING MR. JOHNSTON'S ABSENCE IN EUROPE correspondents will please address all matter for the literary department of the paper, personals, items of news, etc., to Joseph Christie, P. O Box 2675, Philadelphia, Pa.

Subscriptions, orders for books, etc., or in connection with THE OPERATOR Purchasing Agency, and all business communications generally, as well as New York City items, to W. J. Johnston, Publisher, P. O. Box 3332, New York, as usual, to whom Post Office orders, drafts, etc., are to be made payable.

WE call the attention of our readers to-day to the long deferred "Eyes of Blue and Eyes of Brown." It is by a lady writer—the author of "Playing with Fire," and is well written.

OWING to the great press of interesting matter, we are obliged to give only a small portion of "The Thorsdale Telegraphs." We will try and give the remainder of it, however, in our two next succeeding issues.

IN the report, June 21st, of the Eastern Telegraph Company, (limited), whose cable and land lines extend from England to India, there appeared an increase in the expenses of $4,500 for the use of patents for duplex working.

Mr. Johnston's description of the Lakes of Killarney, and a minute account of his visit to the Dublin office, in this issue of THE OPERATOR, are very interesting and instructive. The number of operators employed and messages transmitted, delays, salaries, etc., in the gay capital of Ireland are accurately given. Mr. Johnston is enjoying his well earned holiday, and is being received everywhere by our European brethren in a manner befitting the representative of American telegraphers.

WE present this week another story by John Oakum. As the reader will notice, it is written in the character of an old gentleman—the same in which "An Old Man's Exegesis" and "An Evening Reverie" were penned. The story of "Marion Scudder" is apropos of the season It is a summer idyl, appropriate to the golden days when the wind sighs lazily among the leaves, and the grasshopper turns somersaults on the fields for the amusement of its appreciative friend, the butterfly. To have written such a story, a man may well afford to assume that the sands in life's glass are running fast away, and that but little more remains.

The Great Quadruplex Suit.

The argument in this important suit ended on the 28th ult. The case now rests with Judge Sanford for consideration, and, after the exhaustive briefs submitted by both sides are disposed of, a final decision may be looked for.

The supreme importance of Mr. Edison's invention, and the high scientific character of the witnesses on both sides, together with the commercial value of the points at issue, have attracted wide-spread attention; and a brief *resume* of the attendant circumstances will be necessary to many of our readers to a thorough understanding of the case. Mr. Thomas A. Edison, the inventor of the Quadruplex, in addition to his known ability as a first-class mechanic, has a decided weakness for making contracts, cash down; and, hence, the following somewhat complicated history:

In April, 1871, Mr. Edison, who was then engaged in perfecting the "Automatic," made a contract with one George Harrington, said contract to continue in force until 1876, by which it was agreed that all inventions in "*automatic* telegraphy" made by him (Edison) during those five years should be owned equally by the contracting parties, Edison and Harrington, and that neither should have the right to sell without the consent of the other. This contract was recorded May 6th, 1871. That Mr. Harrington, who had just returned home after serving as our minister to Switzerland, desired improvements in the automatic system *particularly* is plain from the fact that he was about forming, and did form, in conjunction with Messrs. Reiff and McManus of Philadelphia, and others, the Automatic Telegraph Company, from New York to Washington. Subsequently, Edison made another contract with Harrington, assigning two-thirds of his own interest in his own inventions in automatic telegraphy to that gentleman, and giving him (Harrington), power of attorney to dispose of the other third. Harrington afterward sold his rights under these contracts to Jay Gould; Jay Gould, in turn, assigns them to one Mills, and Mills conveys them at a later period, to the Atlantic and Pacific Telegraph Company. It thus appears that the Atlantic and Pacific Company became owners of all inventions of Mr. Edison in "automatic telegraphy" during the period of five years between 1871 and 1876, as provided in the contracts between Edison and Harrington.

Three years before the Harrington contract expired—namely, in 1873—Edison again came out strong in contracts. In that year he contracted with the Western Union Telegraph Company to prosecute, research, and invent in the separate field of *duplex* and *quadruplex* telegraphy, and that said inventions, if any, should belong to the Western Union Company.

In 1874 Edison made another contract with George B Prescott, electrician of the Western Union Company, assigning one half of his inventions in quadruplex telegraphy to the latter person, neither party to sell or use the invention without the consent of the other. In return, Prescott was to pay the expenses of getting out patents, &c. In the same year, (1874), with facilities furnished by the Western Union, and under their direction—as their *employe*, if the 1873 contract was valid—Edison, or Edison and Prescott perfected the famous quadruplex, and late in that year it was worked successfully from New York city westward, on the Western Union's lines.

Although no patents had been taken out on the newly born system, the Western Union authorities at once paid Edison $5,000 on account, but owing, as it is claimed, to Mr. Orton's absence in Chicago, some delay occurred in the acceptance of Mr. Edison's final offer, Mr. Orton relying on the supposition or agreement that disputes, if any, regarding the compensation were to be referred to arbitration. At this juncture, with $5,000 of the Western Union's money in his pocket, Edison again comes out strong in the matter of contracts. On the fourth of January, 1875 he made a contract with the Atlantic and Pacific Co., assigning his inventions in duplex and quadruplex telegraphy to that company, for the sum of $30,000. About this time Mr. Orton accepted Edison's offer to pay him for the entire property the sum of $25,000 down, and $233 for each circuit on which the quadruplex should be used. Edison, in reply, offered to return to Mr. Orton the money already received from him on account, and said he was advised that a previous contract with Harrington would prevent him from assigning the patents to the Western Union. This action was evidently taken in the interest of the Atlantic and Pacific, which company, in addition, claimed a right to all of Edison's inventions in automatic telegraphy for the five years succeeding 1871, the said right being derived by them from one Mills—Mills' right from Jay Gould, Jay Gould's right from George Harrington, and Harrington's right from his contract with Edison, in 1871.

It will thus be seen that Edison made five contracts, viz: One in 1871, assigning half his interest in all inventions in *automatic* telegraphy to Harrington for the ensuing five years: and a second one, supplementary to this, giving in reality the whole of his interest in said inventions to Harrington. These contracts, which had been considered stale and inoperative after the collapse of the Automatic Telegraph Co., are now held, by purchase, by the A. & P. Co. Contract No. 3. was made in 1873, with the Western Union Co., giving to them the results of his prospective inventions in *duplex* and *quadruplex* telegraphy. Contract No. 4 was made in 1874 with Prescott, assigning to him half of his (Edison's) interest in said inventions; and, contract No. 5, in 1875, deeded the entire proprietary interest in the same inventions to the Atlantic and Pacific Telegraph Company.

The patents have not yet been issued, but the Patent Office has expressed an opinion upon this kind of dealing by deciding that the patents shall issue to Messrs. Prescott and Edison. This decision recognizes the 1874 contract between Edison and Prescott, which, in turn, binds them to deliver the patents to the Western Union Co. Suit is now brought by the Atlantic and Pacific to restrain the issue of these patents, and also praying a decree that, when issued, the patents shall be assigned to the Atlantic and Pacific Company.

Suit was commenced in the Superior Court, April 19th, and the case was left with Judge Sanford for consideration on the 28th of June. It has excited the liveliest interest, and collected an array of talent, both as witnesses and pleaders, seldom seen in New York. Among those who testified were: Thomas A. Edison (for the plaintiffs), Hon. William Orton, General Eckert, Henry Van Hoevenburgh, Frank L. Pope, George B. Prescott, Gerritt Smith, and George D'Infreville.

The eminent lawyers handled their subject without gloves, the remarks of Mr. Dickerson on one side, and General Butler on the other, would make interesting reading for the admirers or haters of either party.

It is averred that when Edison was asked by those representing the Western Union how the Harrington contract of 1871 would affect his agreement of 1873 with them, he replied: "Oh, that does not refer to this invention"—(the quadruplex). General Butler claims, on the other hand, that Edison bound himself in 1871 to Harrington, for five years, "body, soul, and brain," and that "all that should spring from his ingenious mind should be covered by it." The main question to be decided now by Judge Sanford, is, whether the contract with Harrington in 1871, regarding "all inventions in "*automatic* telegraphy" was broad enough in its scope to cover a subsequent invention within the specified five years in quadruplex telegraphy.

Whatever the result may be, we sincerely hope that both sides are very close to the end of this treasure-eating competition, and that they may now see the wisdom of putting up their lances and "dented shields." Advertisements are now floating through the newspapers, demonstrating that divers telegraph combinations are purely eleemosynary institutions, gotten up exclusively to act as benefactors to the public—which, of course, does not include operators. If they will give us a rest on these shams, and attempt a policy which will result in benefit alike to both the shareholder and the toiling operator, there will soon be a healthier system of management on both sides, and less legal squabbling and reckless competition.

The Blue Jeans System in Government Telegraphing.

An order issued by the War Department, recites that as no appropriation has been made for telegraphing for the present fiscal year, army officers shall issue certificates to telegraph companies whose lines they use, such certificate stating that so-and-so much is due, but that "the holder of such certificate is to have no claim against the United States, unless Congress shall make an appropriatiou therefor."

Another order, emanating from the colossal brain of the Postmaster General for the Southern Department, prescribes certain very cheap rates for very long messages, at which Government telegraphing *must* be done, and provides that, how cheap soever the telegraph companies may send messages, "at no time shall the Government"—even at these rates of their own selection—"be compelled to pay more for a twenty five word message, *including* address and signature, than the public is required to pay for a ten-word message, *exclusive* of such address and signature. There is a tinge of satire in the learned Postmaster General's peroration: "This order will materially diminish the cost of Government telegraphing," which, of course, implies that the telegraph companies shall make up the deficit, as well as affording the Government unlimited "trust."

Lightning Flashes and Electric Dashes.

We are in receipt of a great number of letters speaking in terms of high praise of this ably written and profusely illustrated work. As our sales are so great to those not immediately connected with the profession, we think that no telegrapher can afford to be without one. There can be no neater or more appropriate present to a fellow or sister operator than this work, and to your friends in other professions it will prove highly amusing and instructive. Send $1.50 for a copy, or if you can get up a club, send $3.75 for each three copies. This price is to members of the profession only; to others the price is $1.75.

We have a few copies of the third edition of "Oakum Pickings" left—an attractive and popular work which has recommended itself everywhere. The price in full cloth is $1.50; but, in answer to numerous requests, we have issued precisely the same book, with the steel plate engraving of the author, bound in strong paper, at the extremely low price of 75 cents.

* * *

At a recent visit of Secretary McCrary to the Signal Service School at Fort Whipple, Va., some interesting drill was performed by the telegraph corps. This included the rapid construction and working of flying telegraph lines, the wires being reeled out, erected, and established as rapidly as a man could walk, and as rapidly taken down, repacked, and moved off. After messages had been sent by electricity, messages were sent and answered by seen flashes at a distance of over five miles, and at the same time signals were transmitted and received by the flag motions of the signal code, and by the permanent flag signals of the international code as used for the seacoast service.

The Best Time on Record.

The Direct United States Cable Co. performed a remarkable feat on the 30th of May, in bringing from London for the National Associated Press the result of the Derby Race. The time of transmission from the Company's London office to the New York office was five seconds. Mr. Ward, the superintendent of the New York office, says the time occupied was so short that in reality it could not be accurately computed, but five seconds was the outside limit. It took just forty-five seconds for the dispatch to reach the office in New York of the National Associated Press, from the time of filing in London.

The Atlantic and Pacific Telegraph Company also deserves credit for the prompt manner in which the report of the race was handled after it reached New York.

This item has been unavoidably crowded out of the last two issues.

* * *

Medical Telegraphers.—A number of the physicians and druggists of East Brooklyn have formed an association for the purpose of connecting their offices and stores by telegraph, and thus not only facilitate their business, but to a certain extent control the transient trade of the neighborhood. By this means a person living at a distance from his family physician can, in case of necessity, go to the drug store and have the doctor called, thus saving himself from a long journey and perhaps dangerous delay. A great deal of circumspection will be used in the selection of both physicians and druggists, as, of course, every message sent along the line, unless sent in cipher, can be read in every house or store where there is an instrument. They propose to connect the wire with the Long Island College Hospital and the City and other large hospitals. In case of street accidents or casualties involving human life, a score of physicians could be called before a messenger could reach the nearest station house to telegraph for the ambulance. Some of the anti-telegraph doctors say it is a despicable attempt to get a monopoly of furnishing the coroner with jobs. Meanwhile there is a lively fight going on, and there is a chance of all the sick in Brooklyn getting well for want of medicine.

Themes for the Thoughtful.

Joys are our wings, sorrows are our spurs.

The beams of joy are made hotter by reflection.

Fortune is the rod of the weak and the staff of the brave.

Outward judgment often fails, inward justice never.

Everything, even piety, is dangerous in a man without judgment.

He who can conceal his joys is greater than he who can conceal his griefs.

Death is a friend of ours, and he that is not ready to entertain him is not at home.

How would you be if He, which is the top of judgment, should judge you as you are?

Friendship is the medicine for all misfortune; but ingratitude dries up the fountain of all goodness.

A jest's prosperity lies in the ear of him that hears it, never in the tongue of him that makes it.

There is nothing that is meritorious but virtue and friendship, and indeed friendship itself is but a part of virtue.

As the touchstone which tries gold, but is not itself tried by the gold; such is he that has the standard of judgment.

No company is far preferable to bad, because we are much more apt to catch the vices of others than their virtues, as disease is far more contagious than health.

Small debts are like small shot, they are rattling on every side and can scarcely be escaped without a wound; great debts are like cannan, of loud noise and little danger.

A young man ought to cross his own rules, to awake his vigor and to keep it from growing faint and rusty; and there is no course of life so weak and sottish as that which is carried on by rule and discipline.

It appears to be among the laws of nature, that the mighty intellect should be pursued and cooped by the little, as the solitary flight of one little bird is followed by the twittering petulance of many smaller.

There is nothing more to be esteemed than a manly firmness and decision of character. I like a person who knows his own mind and sticks to it; who sees at once what is to be done in given circumstances and does it.

If this life is unhappy, it is a burden to us, which is difficult to bear; if it is in every respect happy, it is dreadful to be deprived of it; so that in either case the result is the same, for we must exist in anxiety and apprehension.

Handsomeness is the more animal excellence, beauty the more imaginative. A handsome Madonna I cannot conceive, and never saw a handsome Venus; but I have seen many a handsome country girl, and a few very handsome ladies.

Managers are the root, laws only the trunk and branches. Manners are the archetypes of laws. Manners are laws in their infancy; laws are manners full grown; or, manners are children, which, when they spring up, become laws.

I will govern my life and thoughts as if the whole world were to see the one and to read the other; for what does it signify to make anything a secret to my neighbor, when to God, who is the searcher of our hearts, all our privacies are open?

Without depth of thought or earnestness of feeling or strength of purpose, living an unreal life, sacrificing substance to show, substituting the fictitious for the natural, mistaking a crowd for society, finding its chief pleasure in ridicule, and exhausting its ingenuity in expedients for killing time, fashion is among the last influences under which a human being who respects himself or who comprehends the great end of life would desire to be placed.

Eyes of Blue and Eyes of Brown.

"She is different from most girls. There was something far more real, and lasting, and noble in what has happened to her here than any mere sentimental romancing or brooding forlornness could have made it." — SIGHTS AND INSIGHTS.

It was very quiet in the office that afternoon. The soft breath of the young summer came gently in through the window and lifted the hair from the rather low forehead of my friend as she sat before her instrument, with that sad look in her brown eyes which I had thought about and wondered at so many times. I do not think this friend of mine, Genie Marshall, operator at A—— Station, could be called handsome, but there is that about her which causes strangers to take a second look at her, and her friends to declare her to be "decidedly *fine* looking." No words had passed between us for some time. We had arrived at that stage of friendship when silence is allowable. At last I said:

"Genie, as I was riding past M—— Station I noticed the operator, and thought there was something striking in her appearance, although I saw her but an instant."

"Are you quite sure it was the operator?" she asked.

"Yes," I replied, "for she was using the key as I passed. A rather large girl, with light brown hair and blue eyes. And, Genie, do you know I fancied there was just such an expression on her face as you wear sometimes?"

Genie's face lighted up at once. "Yes, I know her well," she said. "And, Annie, the world does not hold so dear a friend for me as she."

"Tell me about her, please," I said, as I placed my feet on an ottoman and leaned back in the office rocker.

And so she told me her little story, pausing occasionally to receive or send a message, or to answer a question asked by some other operator.

"My acquaintance with Isa Campbell began nearly three years ago," she said. "My first lessons in telegraphy were taken in an office a few miles above her on this road. As soon as I could send well enough to be read, I commenced chatting over the wire with any one who cared to practice with me. But I was particularly fond of talking with some one who signed C., and whom I soon learned was the operator at M——. Her witty speeches and quick answers attracted me at first, but I came ere long to admire her for her politeness and kindness. As soon as I became an ordinarily good paper operator I was placed in this office. Then Isa became my friend in earnest. When I was lonely, sad, or discouraged, she was always ready with words of cheer and comfort, and in my heart I blessed her a hundred times a day. I was ambitious and very anxious to learn to read by sound; so night after night, when all the other day operators had left their offices, she wrote for me to copy; very slowly and carefully at first, then a little faster, and at last, under her tuition, I became a good sound reader. Letters were exchanged between us, and we visited each other occasionally when we could find a spare operator who was willing to stay in our place. Our friendship grew and strengthened until we earned for ourselves the names of Ruth and Naomi. Oh, Annie, those days were so full of sunshine and joy! You remember my brother Harry, Annie? You surely have not forgotten how I loved him. As a boy he was so handsome and manly that I had high hopes for him, and I cared for him with an intensity of feeling that few sisters ever dream of. You may not have heard how, after you left our village for your Western home, he went astray. Bad company did it. His heart was right, but his will was weak. Night after night found him with his evil companions, while night after night my pillow was soaked with tears which the thought of his downward course caused me to shed. You know he was a cabinet-maker. I had hoped he would take up some profession, but this he did not seem inclined to do, and I doubt if he would have been fitted for it after wine and dissipation had made such inroads on his constitution. Some months after I had taken my last message on paper he was temporarily thrown out of employment by the burning of the establishment in which he was employed. I did not wish him to have idle time on his hands, for I knew too well where it would be spent, so I proposed that he should learn telegraphy, going and coming on the train if he must board at home. He eagerly assented, only too glad to have something to do. He learned rapidly, and in the course of a month could send and receive by paper very nicely. Very soon he formed the acquaintance of Isa, and every day chatted freely with her over the wire. I often left him to care for the office and went out rambling, and he would invariably say when I returned: 'Say, Sis, it strikes me that friend of yours must be a remarkably fine girl. I have been having a glorious chat with her.' And then after a time it came to pass that nearly every day a box of confectionery, or a book, or some choice flowers bought from a green-house near by were sent to her by him, accompanied by notes which brought charming Isa-like answers, which at first were shown to me, but after a few had been received were put carefully away in his portemonnaie, before any third person had read them. Gradually I came to know that my brother Harry loved my friend Isa, and, Annie, I can never tell you how much pain the knowledge gave me, for I feared she might love him in return; and, hard as it was to admit it, I knew he was not worthy of her love. He had called on her a number of times in her office, and was continually praising her to me. He had drank but little since he came to my office, but I was not prepared to think he would leave off this evil habit entirely. One day, when he had been with me about four months, he received a letter from his late employers saying they were ready for him to commence work again. He handed me the letter when he had finished reading it, and as I was putting it back in the envelope he said:

"'You see, Genie, I must go back to my work very soon, but to-morrow I am going to M—— to ask Isa Campbell to be my wife.'

"'Harry, dear Harry,' I pleaded, 'I beg you will not do this thing. I love Isa too much to wish to see her the wife of a drunkard, even though he be my own loved brother.'

"His face was very grave as he answered:

"'And she shall not be the wife of a drunkard, Gertie. I have resolved this day that with God's help I will begin a new life. Never again shall you have cause to be ashamed of your brother. I will sign the pledge, and for her sake and yours will try to be a *man*.'

"How my heart leaped up at his words! I could not speak for gladness, but I arose, and bending over kissed his forehead, and I am sure he understood the feelings I could not put into words. He spent the afternoon at M——, and that evening in my office he said to me:

"'Genie, if strength is given me to resist temptation long enough to rid myself of this cursed habit—and I feel sure it will be with two like you and Isa praying for me—your friend is to come to our home in the early part of next June as your sister and my wife.'

"Two months from that time, one glorious Sabbath morning, Isa and I stood on the shore of a beautiful sheet of water near my father's home and saw our Harry led down into its depths, and the voice of the gray-haired man as he repeated, 'I baptise thee in the name of the Father, Son, and Holy Ghost,' seemed like that of an angel to us.

"The autumn and winter passed rapidly away. Harry had never once swerved from the right path, and his eyes grew bright and his step firm and elastic. He was fast becoming what he had promised to be, a *man*. A noble, God-fearing man; and many times from my heart there arose the glad cry, 'My God, I thank Thee!' His wedding day was fast approaching, and Isa was soon to give the superintendent notice that she could serve no longer as an operator.

"I wish I could stop here, but I will not leave my story unfinished. One evening, the last of May, I was sitting in my office waiting for the last train, which was to bring Harry. He had been visiting Isa, and was to spend the night at my boarding place. I was lost in dreaming, when suddenly my office was called in a quick, nervous way. I instantly responded, and received this message:

"From S——, May 24th.
To MISS MARSHALL, A——:
Your brother, while attempting to step on the train while in motion, was thrown under it and instantly killed at the station. S——, Station Agent."

"I will not try to tell you all that followed, Annie. You can imagine it all. The next morning Isa—ever mindful of my comfort, even when her own heart seemed breaking—sent me a dear, tender, pitying note, which is now laid away with Harry's letters and pictures. In the mourner's room at the funeral a pale-faced, blue-eyed girl sat, who was spoken of as 'Genie's friend,' and no one but her own family knew that she was to have been Harry's wife, for no one had made the matter public. We try to be contented—Isa and I—and even happy, for we feel sure that some time we shall meet our Harry again, where 'there shall be no more death.'"

As I was on my homeward route the engineer stopped at M—— to take water, and I had a long look at Isa Campbell.

"Yes," I said, "the blue eyes of this girl and the brown ones of my Genie have the same sad yet patient look in them, and I shall wonder at it no more." And then those old, yet ever new lines of Whittier's "Maud Muller" came to my mind:

"God pity them both, and pity us all,
Who vainly the dreams of youth recall;
For of all sad words of tongue or pen,
The saddest are these, 'it might have been.'"

◆◆◆

The resistance of copper wire increases about 208 per cent. for each degree Fahr.—*Latimer Clark.*

THE TELEGRAPH MILITANT.—At a recent visit of Secretary McCrary to the Signal Service School at Fort Whipple, Va., some interesting drill was performed by the telegraph corps. This included the rapid construction and working of flying telegraph lines, the wires being reeled out, erected, and established as rapidly as a man could walk, and as rapidly taken down, repacked, and moved off. After messages had been sent by electricity, messages were sent and answered by seen flashes at a distance of over five miles, and at the same time signals were transmitted and received by the flag motions of the signal code and by the permanent flag signals of the international code as used for the seacoast service.

Scientific Department.

[This department is under the charge of Mr. H. Van Hoevenbergh, 115 Broadway, to whom all communications relating thereto should be addressed. Mr. Van Hoevenbergh will cheerfully answer here any queries pertaining to electricity, magnetism, or kindred subjects.]

ELECTRICAL MEASUREMENT.

IV.

MEASURING RESISTANCES.

The method shown in Article 3, of comparing and adjusting the rheostat, by alternately switching the standard ohm and the rheostat in circuit, and noting the deflection, is termed "Mensuration by Substitution."

In order to apply this method to the measurement of the resistance of an object, as for instance an electro-magnet, or a length of wire, the following course should be adopted:

Connect the object to be measured in place of the standard ohm (second diagram of Art. 3), and note the deflection, by turning the pointed wire so that the end of the pointer is as near to it as possible. Then switch out the object, and put in the rheostat. Then connect the wire G to a point on the rheostat which produces the same deflection, moving it to and fro along the iron wire until this result is attained. Be sure to make a good connection between the wire G and the iron wire. When the same deflection is produced, the amount of iron wire contained between wires F and G, represents exactly the resistance of the object. It may now be read off in ohms by means of the divisions previously arranged. In case a line wire is to be measured, only one end of which is at hand, use the ground as the other end. Be careful to get a good ground for this purpose.

In calculating the proper amount of battery to be used upon a circuit, as well as in determining the resistance of the electro-magnets to be used thereon, the *internal resistance* of the battery should be known. This is necessary, because, to get the greatest amount of power from the magnets of a circuit, with the least consumption of material, the resistance of the battery should just equal that of the rest of the circuit.*

The meaning of the term "internal resistance," may be thus illustrated:

Water has a very high resistance as compared with metals. If two plates made of some neutral metal, not acted upon by acids, such as silver or platinum, were placed in water, a small distance apart, a current from a battery would meet with considerable resistance in passing from one to the other. This is the case with all *galvanic* batteries, and the current generated has to overcome this resistance before passing out upon the outside wires.

The internal resistance of a battery may be easily ascertained with the apparatus described in Articles 2 and 3.

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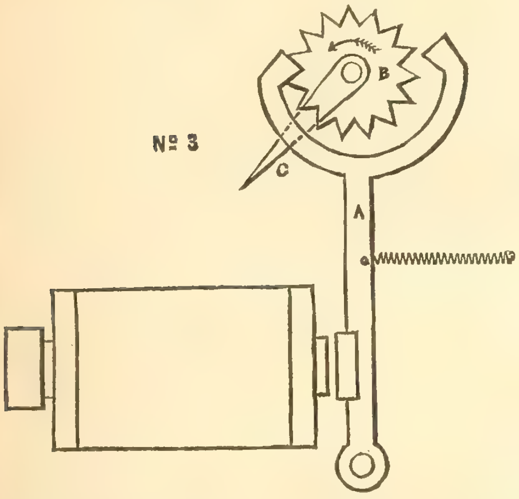
* In practice, this rule is seldom strictly carried out, as it is generally found more desirable to use the battery at a slight loss than to increase the size of the conductor, in order to fulfil the conditions.

It may be done in this manner. Take two cells of the battery to be measured, and connect two of the like poles, for instance in a gravity battery, the two coppers. The two cells, if of the same strength, will then neutralize each other, so that no current can be obtained from the two free terminal wires. To prove this, touch the two wires to the connecting posts of the galvanometer. If no deflection is then seen, the operation may proceed. If the needle moves, even a very little, select other cells, until two are obtained that just balance each other. When this is done, they may be measured in the same manner as any other resistance, the two free wires being used to make the connection. As there are two cells, the resistance of one of them will be the half of the resistance found. The object of connecting the like poles is to destroy the current produced by the cells, which would otherwise interfere with the measurements.

The method of measuring resistances by substitution, although perhaps the simplest and easiest to understand, is by no means the best. Changes in the strength of the current sometimes interferes with the results, and the needle, being swung partially out of the coil, is not so sensitive as is desirable. Another and better method will be shown in Article 6.

ELECTRO-MECHANICAL MOVEMENTS.



№ 3

A current being sent through the electro-magnet, the armature and lever A is attracted, and the star-shaped wheel is advanced, in the direction of the arrow, the distance of one-half of a tooth, by the sliding, pushing movement of the wedge pallet. When the circuit is opened, the lever is pulled back by the spring, and the star wheel is moved in the same direction, the same distance, thus advancing one tooth for each impulse sent.

This movement is very similar to No. 1, and has been used in place of it. It has the advantage of being simpler, though requiring rather more battery power.

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Answers to Correspondents.

Subscriber, Ont.—There is none of that name. There is a "Telegrapher's Mutual Benefit Association," with a cash surplus of $10,000, which pays $1,000 to the family of each deceased member. The average cost of membership is about eighty-four cents per month. If this is what you mean you can get full particulars by addressing the Canadian agent, Mr. A. Hunter, Toronto, Ont.

Alma, Colorado.—The Government station at Pike's Peak is situated higher than any telegraph office in the world that we have record of, viz: 14,150.68 feet above mean tide water. This is 200 feet higher than the Moose Silver Mining Co.'s office at Mount Bross, Colorado.

Devastation.—Consult "Jefferson's Manual," or the excellent work published by ex Gov. John Lyde Wilson, of S. C. Outside of Maryland and Virginia these text books are followed. Cochrane, Jeff. Davis, Graves, Julian May, Cilley, and Sir Lucius O'Trigger all proceeded outside of the regular rule. The O'Gorman Mahon, member of Parliament for Ennis, challenged and successfully fought three men in one day. *We* would choose stuffed clubs.

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There is a paper in London, although not a relation of ours, called "The Co operator"

Lady Operators at the London Telegraph Office.

No girl is allowed to enter the London telegraph office after eighteen, and they may become candidates at fourteen, so that the schooling is for the most part undergone at an age appropriate for tuition. The school is in Telegraph Street, near Moorgate Street, and here telegraphy is inculcated for a period of two or three months. If a poor girl cannot learn the art, there is an end of the matter. If by that time she has gone so far as to show that she probably will learn it, she is sent to the big room at the top of the building in St. Martin's-le-Grand. Here she begins to receive wages. During these school days she receives nothing, nor does she perform any service, but she receives her tuition gratis. On her first entrance into the great world of the telegraph office—that which is to be her world till she becomes a married woman, or during her life of celibacy—she is put in possession of eight shillings a week. But at this period she is hardly of much use as a telegraphist. During half her day she still undergoes instruction, performing light services about the office for the other half. Then, when she is declared to be competent, she is seated proudly at her table, becomes a full-fledged government clerk, and is made the mistress of a weekly stipend of twelve shillings. After three years of services the wages average sixteen shillings a week, and then it is supposed that the girl is fully able to support herself, that is, she can then pay, not only for her clothes and her food, but an adequate proportion of the other expenses of the home she may occupy. Of the total number employed the average wages are eighteen shillings a week, and the maximum wages of those working at the desks are thirty shillings. The wages are paid once a fortnight, on every alternate Friday. There are thirty female superintendents at higher salaries, and to these offices the clerks are, of course, eligible; and there is one matron over them all. When sickness comes their wages do not cease.

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Dashes Here and There.

The Philadelphia and Chicago Duplex has driven more men crazy than any other circuit in the country.

Hot Springs, Ark., is no "snide" place, says our correspondent; permanent population 6,000, floating do. 50,000.

"Monk" Monroe, the Friar Tuck of the Telegraph, now acts as sacerdotal auxiliary to the U. S. Signal Service, at Fort Whipple, Va.

A Cincinnati correspondent suggests the idea of each office having its staff photographed in a group. A relic of this kind improves with age.

Modern first-class operators, in sending long specials very fast, stop once in a while to spit on their hands and secure a fresh grip. The man at the other end utilizes the time by "filling in."

The word "father" in French is *pere*, in German *vater*, in Latin *pater*. In nearly all languages there is a similarity in this dear word, except on American railroad lines, where it is rendered "watper."

Several cities about the head of Lake Erie are planning a sort of Telegrapher's Reunion to be held at Put-in-Bay Island, a beautiful and popular summer resort. "Carl Cable" sighs to make it a national gathering.

There is a rumor that the Western Union is about to purchase from the Government the military line from San Diego to Yuma. Viewed exclusively as a bargain in telegraph lines it would be a poor one at any price.

An extension of the frontier telegraph line is now in course of construction from Fort Stockton to Fort Davis, Tex., and at no distant day it will be carried to El Paso, to connect there with the New Mexico and Arizona lines.

Prof. Bell, who invented the telephone, is a native of Newfoundland. The *Morning Chronicle* of St. John's is authority for the assertion that the Professor is the son of a Mr. Bell who did a small business in that town thirty seven years ago.

THE OPERATOR AS AN ADVERTISING MEDIUM.—A firm doing considerable advertising writes as follows: "We think your paper is doing a good thing for us. We are receiving about twice as many applications for catalogues from our "ad" in THE OPERATOR, as we are from the same "ad" in the JOURNAL.

A philosopher abbreviated "answer quick" as follows: "Please utilize at my expense that which our fathers knew as a subtile fluid, but which modern scientists view only as a mode of motion since the discovery of the corelation and conservation of energy and the persistence of force."

The press of San Francisco is nominating the telegraph staff of that city for the handsomest men in the business. The Canadians nominate Mr. Eckett, operator at "R. S.," on the Grand Trunk Railway. He is described by his backers as wearing the glossiest of Beavers and the whitest of vests. Cleveland, Ohio, names Messrs. Simmons and Derrickson, and calls upon that North Carolina man to "show his hand." Kentucky names Mr. P. Stewart. Georgia names Mr. R. Phelps, and Arkansas names Blake Reynolds.

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Mississippi Division Notes.

This division is flourishing under the management of our gentlemanly and efficient superintendent, G. M. Dugan. Mr. D. has commanded the operators and lines of this road since the first of the year, and from his long years of experience in telegraphing, knows well the duties of a superintendent, therefore does justice to all; may he long remain at his present post (for the operators' sake) The train dispatchers' office, at Water Valley, is efficiently managed by the gentlemanly Pennington brothers—L. M., as chief, and L. H., as night dispatcher. *Lon* organized a Bible class among the night men, but the boys persuaded him to call it a chess club, as some of them could not borrow a Bible.

At Canton we have another veteran, C. St. John, who attends to the combined interests of the W. U. and C. & D. R. R. Mr. Hill is night man. Ed. Whittaker, assistant in dispatch office, is off on the sick list; it is hoped he will soon be with us again. We'll mention the rest of the boys at some future time. Those that take THE OPERATOR are convinced that it is just the thing, and would not do without it. OCCASIONAL.

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P. C. and St. L. R.R.—New Office.

CINCINNATI, June 17

On Monday, June 11th, the superintendent's office, train dispatchers, and auxilliary offices of the P. C. and St. L. R. R. Co. moved into their new headquarters in the stone front building known as the Musodean block, corner of Market and Fourth streets, and one square from the passenger depot of the company. The building was formerly an opera house, but has undergone such necessary changes as to make it the most desirable place in the city for these offices. The situation is a good one. In the renovating of the building neither care nor expense has been spared to make it convenient and comfortable. The operating room is well lighted and has good ventilation. A new switch board is one of the prominent features of the room. The tables are furnished with the latest pattern of keys, relay, and sounder; above the switch board is an alarm bell, which announces the alarm for all fires that occur in the city. Adjoining this department is the battery and coat room. The solicitors, stock and fuel agents, and clerks offices are equally well provided for. The operating force consists of Messrs. L. M. Harris, W. G. Sala, C. R. Green, and M. S. Rice, train dispatchers, and J. S. Converse, and H. S. Tousley, assistants. G.

PERSONALS.

A. Venton has gone to work for the A. and P. at Yuma, Arizona.

John McKessie, late of the Slough of Despond, is now on the Grand Trunk Railway.

Mr. E. S. Barber has accepted a position as night operator with the C. R. R. of N. J., at Bound Brook, N. J.

Messrs. Fischer and Preece, of the English Postal system, have sailed for home. They have made a great many friends here.

George Madison Myers, formerly of the A. and P., at Kansas City, is now connected with the same company at Omaha, Neb.

At Ocean View, during a recent thunderstorm, 34 telegraph poles were struck by lightning in a distance of a mile and a half.

Mr. Woods, the nightman at Portland, Me., has started for a month's vacation in the Adirondacks. Mr. Shum, of Conway Junction, is subbing for him.

The night office at "F N," Riverton, N. J., has been opened for the summer. For musical and [illegible] sociability, there are few offices that can equal "Fa."

S. M. Field, Jr., is day operator, and T. H. Brown, late of N. P. R. R., works nights for the L. V. R. R., at L. and B. Junction, Pa. Mr. C. Stork attends to the L. and B. interests at the same place.

There is a rumor in Philadelphia W. U. circles that Charlie Hall is to be offered a general superintendency. The rumor does not appear to have much foundation, but it has already received very favorable consideration from Charlie Hall.

Florida.—George Helms is at the Tallahassee city office, a situation filled until recently by Mr. C. H. Bush, who was discharged for knowing too much about election telegrams before the Investigating Committee in Washington. Mr. Goodwyn is at Baldwin, Messrs. Coyne and Hernandez at Jacksonville.

Oney Gagin has returned to his post at Portland, Me., after his sojourn in the Adirondacks, looking hale and hearty. He did not bring home a deer, as promised, as he complains that every time he took aim they "moved." He is going to inclose himself in a barrel and see if he can steal a march on one next time. Several cows were maimed with buckshot during his hunting tour.

Iowa C. and N. W. R. R.—On the Iowa Division there are 52 telegraph stations, with city offices at Clinton, Cedar Rapids, Marshaltown and Council Bluffs. The main offices are at Clinton, Belle Plain and Boone. Henry Mohle, at Boone, has charge of the line; he is assisted by Fred. Patter and E. J. Walsh. R. E. Spurrier, night operator at Grand Junction, was married recently.

The operators of the Pittsburg Division, P. R. R., held a Basket Picnic, at Wall's Station, on June 27. There were some 30 telegraphers present, accompanied by their ladies, and also a number of non-telegraphers. Under the management of Messrs. McBrarity, Myers, Tucker, Ermie, Mitinger, Hugo and Shoupe, the picnic was a pleasant affair. Superintendent Pitcairn furnished transportation for the party.

San Francisco.—Chief operator Thomas H. Berry has blonde whiskers and is well liked by the men. E. N. Snider is the worthy night chief. Mr. Wm. Foley works the "Stock" wire to Virginia City, and makes the best copy in the office. Frank Molina works the "Overland" wire; his specialty is a weak mustache. G. W. Campbell works the Los Angeles wire, and John Milliken is the popular book-keeper.

Cleveland, O.—There is a working force of 25, of which the principal luminaries on the day force are Messrs. O. A. Gurley, Fred. Loomis, Patterson, Cronenberger and Hanford. Cleveland boasts one of the most exemplary night forces in the west, consisting of Messrs. Lowe, Manning, Billings, Simmons, Wilcox and White. S. B. Derrickson is all night man. Business is improving rapidly and 3 men have been added to the day force during the last two weeks.

Texas.—Mr. Boon resigned from the W. U. office at Denison to accept a position in the military office at San Antonio, but changing his mind has gone to work for the W; U. at St. Louis. T. W. Milburn is manager at San Antonio, assisted by Miss Palmar. W. J. Cundall is assisted by E. M. Dunbar at Fort Concho. W. D. Boeme relieves G. I. Copp at Fort Sill; Copp goes to Denison as manager. G. O. Appleby has been transferred from Eagle Pass to Uvalde.

Hot Springs, Ark.—A. H. Stewart, night chief at Nashville, Tenn., P. Holcomb, chief operator at Atlanta, Ga., M. T. Welsh, train dispatcher I. and G. N. R. R., Longview, Tex., and J. B. Harrison of Ga., are all rusticating at the Springs. Mr. W. D. English is the manager of W. U. at that place, assisted by T. G. Wall. Blake Reynolds of Chicago is operator for the Hot Springs R. R. He is in nomination for the "handsomest man," but, being only 14 years old, he has been ruled out.

D. and H. C. C. R. R. A. and S. Division.—The popular Supt. Angell has the following force under his supervision: W. E. Chatterton at the freight office at Binghampton, W. M. Healey at Ninevah, George Morgan at Sidney, C. A. Corbin at Otego, Mr. Wheeler at Oneonta, Mr. H. A. Monroe at Cobleskill, Jay Tucker at Quaker St., H. F. Walker, "Jo," fresh from Vermont, P. H. Connors and Paul Wadsworth are at different offices in Albany, W. K. Harcourt and E. J. Burgess are at "Rs."

In Georgia, C. R. R.—Mr. T. Rhodes is operator and listing clerk at C. R. R. Depot, Augusta. R. Phelps, the best looking man on the line, is at Waynesboro. George Dwell is operator and agent at Millen, assisted by Wm. Terrell. S. B. Fielding is at Bartow, and J. H. Morgan, who has just been married, at Sandersville.

Mich. Central R. R.—Messrs. J. W. Cadman, C. A. Carey and F. G. Smith are the train dispatchers. At Parma, H. Hall has charge. O. B. Wood is at Albion, F. D. Swan at Marengo, G. A. Northrop at Marshall, James Sulton at Battle Creek, Miss M. Duffin at Galesburg, J. J. Griffith at Kalamazoo, P. G. Kennedy at Lawton, Miss F. Casto at Decatur, Mrs. Sprague at Dawagiac, Miss Bracken at Niles, Mrs. Bennett at Buchanan, and Mr. H. H. Harris at New Buffalo. Fred. R. Buskirk is relief operator.

C. S. and C., Ohio, R. R.—The genial Mr. Hill is train dispatcher at Sandusky. Miss Chase is at Clyde, Mr. McCartney at Green Springs, G. B. Stevens at Tiffin, Chas. Smith at Carey, Mr. Reese at Forest, C. Harris at Kenton, and C. Mains at Belle Centre, A. Brakaug at Bellefontaine, Mr. Kendall at West Liberty, Mr. Edmondson at Urbana, and Mr. Williams at Springfield. On the branch road, Mr. Thomas Cobey is at Plattsburg, C. H. Wiseman at London, T. J. Nash at Georgesville, and Harry Horton at Columbus.

Montreal—Grand Trunk Railway.—At the "O. S." despatching office are Messrs. McDonnell, Egan, Kingston, Conway, Tannerman and Henry. At "Rs" Messrs. Eckett and Nelson. At "C. I." Messrs. Barton, Jordan and Paixette. At "S." Messrs. John McRosie, Rogers, and Geo. Stone. Messrs. Langstaff (fastest operator in the city) and Corner are at "Na.," and S. B. Dean is at Sc. The last named individual is the inventor of a new self-acting-central-fire-back-action-double-jointed telegraph alphabet, with which he continually salivates his comrades.

DEATHS.

Dodge.—At Newburyport, Mass., July 3d, Frank Dodge, operator at the E. R. R. depot, Newburyport, aged 23 years.

The deceased was run over by a freight train in front of his own office, where he had been employed for the past five years. His funeral, which took place on the 5th inst., was attended by Superintendent Rowell and a number of operators. The telegraphers on the E. R. R. intend to erect a handsome marble slab to his memory.

Stewart.—Thursday, July 6th, 1877, at Cairo, Ills., Charles E. Stewart, night operator for the I. C. R. R. at Cairo. Mr. Stewart was drowned in the Ohio river while bathing.

MARRIAGES.

Battin—Clark.—July 4th, 1877, at the residence of the bride's mother, Toronto, S. Battin, of the Superintendent's Department, and Miss Bella Clark, of the operating department, at Toronto.

The happy couple left the same evening for a tour in the East. Mr. Battin is much esteemed by all who know him, and the large circle of friends of both bride and groom heartily wish them much happiness and prosperity.

Huntington—Lair.—At the residence of the bride's father, Paterson, N. J., Monday evening, June 18th, 1877, by the Rev. T. Walters, Mr. F. M. Huntington, of the Penn. R. R. Tel., 526 Broadway, N. Y., to Miss Prudie Lair.

Abernethy—Black.—On Tuesday, June 26th, by the Rev. G. W. Ball, at the residence of the bride's father, Mr. Thos. R. Abernethy, Manager A. and P. office, Mansfield, Ohio, to Miss Mary A. Black, of Loudonville, Ohio.

BIRTHS.

June 3d, 1877, to E. A. Keene, Jr., of the Oil City, Pa., W. U. office, a son, eight and a half pounds. First edition.

July 9th, 1877, to W. J. Sipple, Division Operator, Erie Railway, Jersey City, a fine girl. First edition.

July 7th, 1877, to G. W. La Rue, Operator Warder, Mitchell & Co.'s office, Springfield, Ohio, a son, weight 9 lbs. Second edition.

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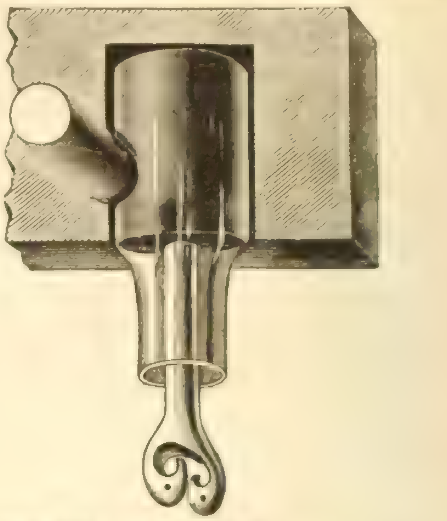

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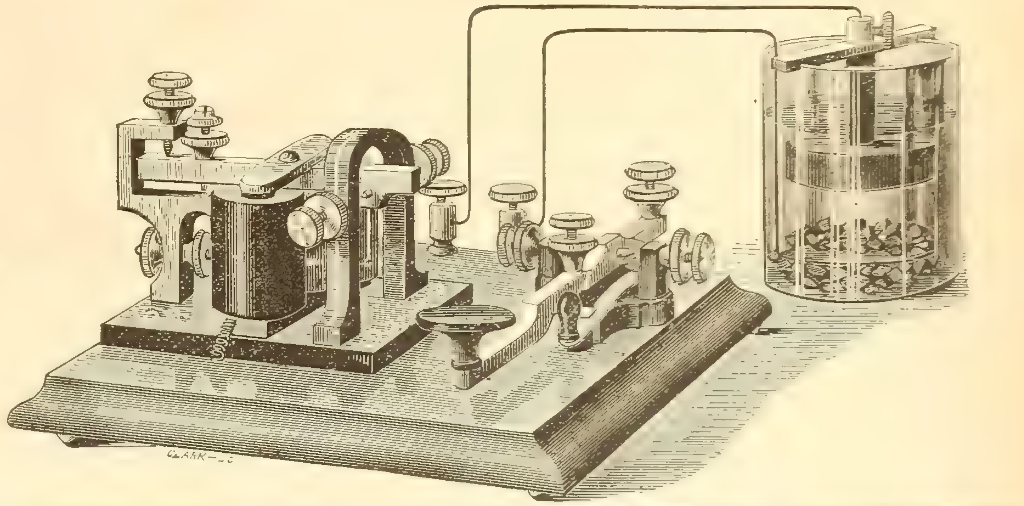

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Instrument without Battery	5.25	" "	4.20
" " " wound with finer Wires for lines of 1 to 15 miles	6.25	" "	5.00
Cell of Battery, complete	1.00	" "	.80
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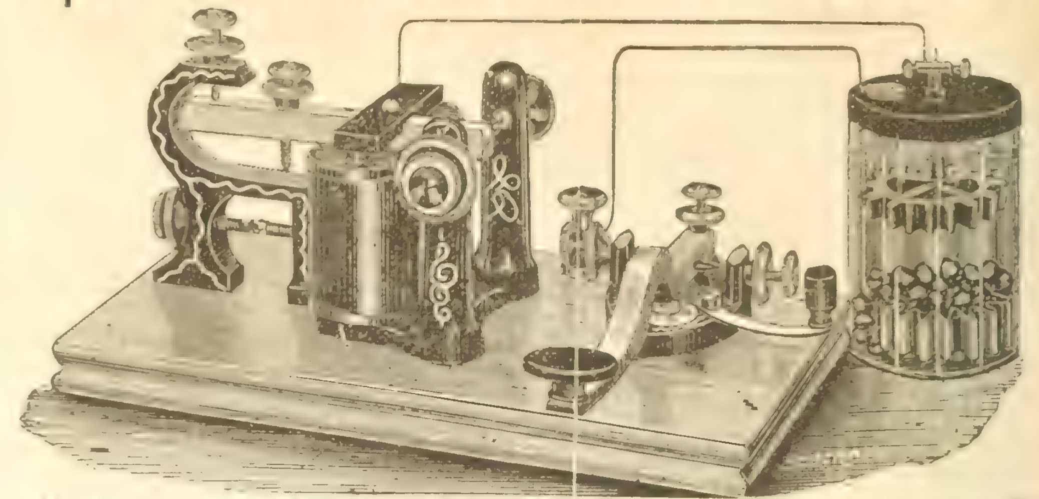

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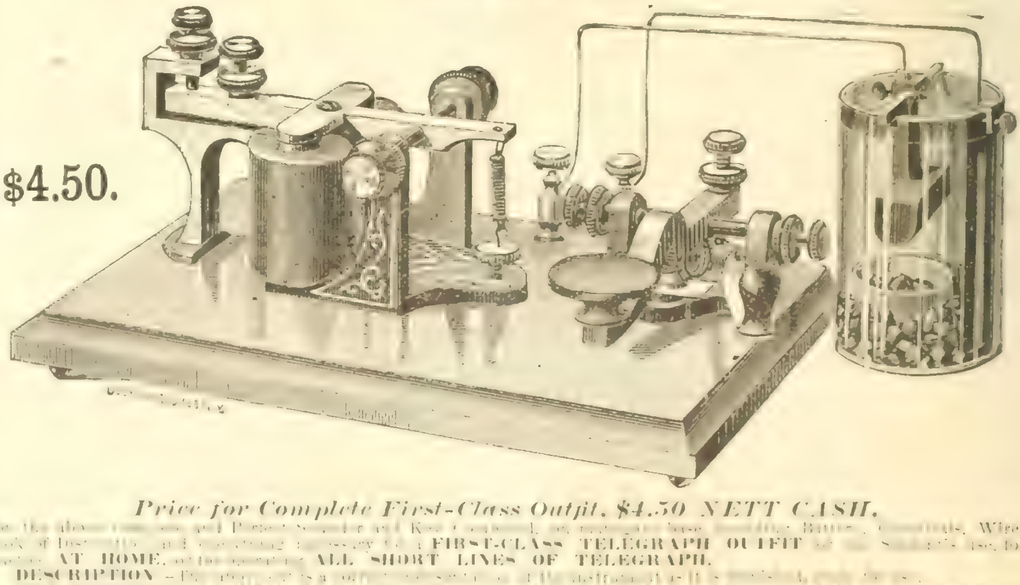

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A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

Vol. VII. NEW YORK, AUGUST 1, 1877. No. 11

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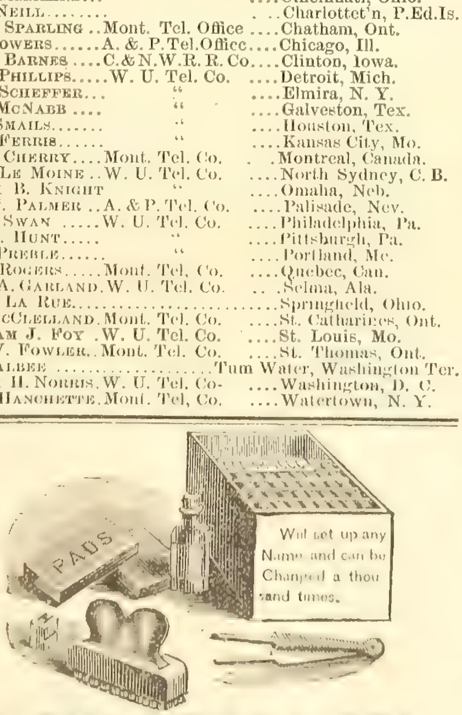
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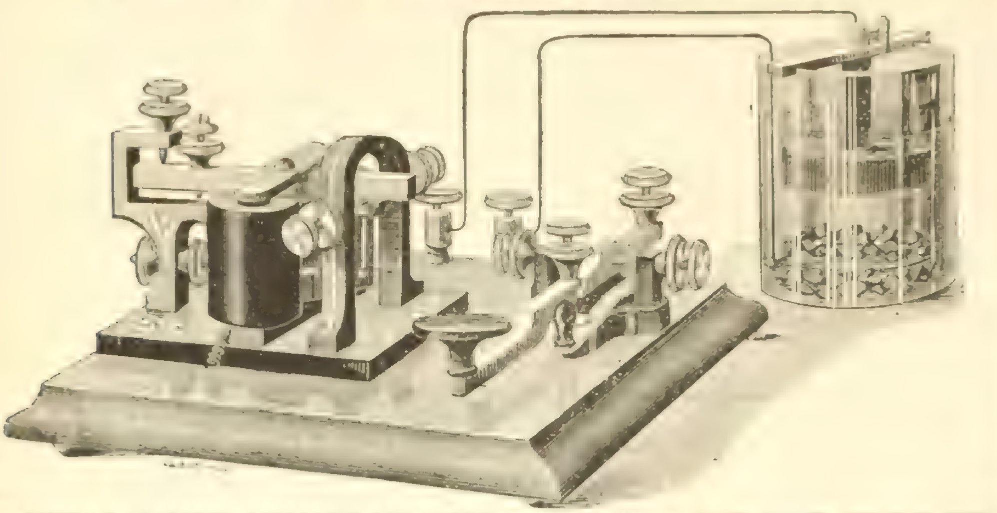

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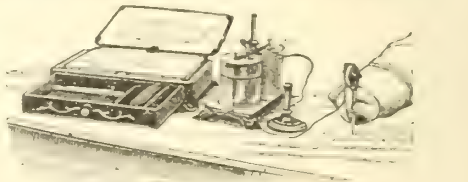

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THE
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August 1st, 1877.

Volume VII. **Whole No. 83.**

Only a Woman.

BY HESTER A. BENEDICT.

Only a woman, shriveled and old!
The prey of the winds and the prey of the cold!
Cheeks that are shrunken,
Eyes that are sunken,
Lips that were never o'er bold.
Only a woman, forsaken and poor,
Asking an alms at the bronze church door.

Hark to the organ! Roll upon roll
The waves of the music go over her soul!
Silks rustle past her
Thicker and faster;
The great bell ceaseth its toll.
Fain would she enter, but not for the poor
Swingeth wide open the bronze church door.

Only a woman—waiting alone,
Icy cold, on an ice-cold throne;
What do they care for her?
Mumbling a prayer for her,
Giving not bread but a stone.
Under old laces their haughty hearts beat,
Mocking the woes of their kin in the street.

Only a woman! In the old days
Hope caroled to her her happiest lays;
Somebody missed her,
Somebody kissed her,
Somebody crowned her with praise;
Somebody faced up the battles of life,
Strong for her, who was mother and wife.

Somebody lives with a tress of her hair
Light on his heart, where the death shadows are;
Somebody waits for her,
Opening the gates for her,
Giving delight for despair.
Only a woman—nevermore poor—
Dead in the snow at the bronze church-door!

◆

Marion Scudder.

A MYSTERY.

BY JOHN OAKUM.

"I will not weary you," he went on rapidly, "with a recital of what I suffered in the next few hours. Though I was satisfied that I was suspended above the Atlantic Ocean, and the beating of the sullen waves beneath me sounded plainly in my ears, what cared I? Marion, my Marion, gentle, loving, peerless Marion had perished. And how, only God and the angels knew. I laid down in the bottom of the car, and waited for death. It could not be far off, I reasoned, for it was now light, and as far as the eye could reach there was one vast expanse of water. It was the Atlantic; that was patent, and I made ready to meet my fate. After lying in a semi-dazed state of despair for hours, I was at length awakened to consciousness and action by a rustling, scraping sound. As I staggered to my feet the balloon tilted, and it was only by a quick movement and by strenuously holding on to the rigging, that I escaped being thrown from the car. Ready and willing to die, with nothing but sorrowful recollections and a future as dull and cold as the tomb, Fate decreed that I should live. The car had caught in the top of some lofty forest trees, and in a few moments I was safe on *terra firma*. I found a village near at hand, and having the good fortune to find a man who spoke French, I ascertained that I had come to anchor in Norway. That I was beside myself with grief you can readily believe. But what could I do? I could not communicate with Marion's friends in Paris even if they still remained there, which was unlikely, and so I proceeded with all haste to Liverpool, and took the first steamer for home. From Allentown I wrote her relatives in Albany the sad story of Marion's mysterious death, and my brother, who is a merchant in Shanghae, being on the point of returning to China, I accompanied him thither, hoping to bury my troubles by diving into commercial pursuits. But it was useless; I stayed in China until last year, and then came to New York as a representative of my brother's firm."

Kirschbaum seemed much moved at this point, and walked nervously about the room for two or three minutes. Then he proceeded:

"Perhaps I told you yesterday that Central Park has a strange fascination for me. No? Well, it has. One day some months after my arrival, while I was horseback riding, I came upon a lady and gentleman, and that is all I remember. I swooned in my saddle and fell. When I revived I was lying in a summer house near where I had fallen, and the result of the fall was to put me in bed for three months. You naturally wonder what caused me to faint. I will tell you.

"*I had seen Marion Scudder.*

"And what was worse, I learned that she was married. You saw her yesterday, sir, in the person of Mrs. Howard Vaughn."

"But how did she escape death?" I inquired, aghast. "Why did she marry, why did—"

"There is where the mystery comes in," he interrupted. "I arranged an interview when I got out again, and she charged me with having betrayed her, of having left her to perish in Paris, while she maintained that she was in readiness at the hotel as agreed at seven o'clock precisely, and that I never came to her, which was true enough. Finally she denied that she ever set foot in that balloon. And so, chagrined at my supposed desertion and almost crazed with fear, she was about to give up all hope, when Howard Vaughn, a casual acquaintance of ours then, came to her like a guardian angel, and got her safe out of Paris. Piqued by my supposed cruelty and subsequent running away to China, as she inferred, and earnestly besought by Vaughn, who really loved her, she finally consented to be his wife. Moreover, she blamed me for writing, wantonly as she then believed, to her relatives, thereby plunging them in grief at her death while she was still living and well."

"But who was the woman you took with you by mistake, and whose unhappy death sent you off to China? How in the world could you have made such a blunder? I should suppose—"

"Stop there, my friend," he said in measured accents, raising his finger, "the woman I took from Paris was Miss Marion Scudder *or her ghost*. Why, sir, we talked of matters—matters affecting our future—known only to us two. No other person could have—why sir" he exclaimed passionately, "Do you suppose I could have made a mistake? Impossible, absurd, preposterous!"

"But your story is so unreasonable as it stands. I don't believe in ghosts—I cannot understand—"

"*You* cannot understand," he said, with biting scorn. "*I* cannot understand it either, nor can she, and we have been studying upon it for months. Do you suppose, sir, that *you* who haven't yet had time to even digest the bare facts can understand what has been and will be a life long enigma to those who are most vitally interested? Do you imagine" he inquired, with a burst of indignation, "that I would bring you here to listen to a tame recital of matters that you could *understand* after the specific statement that what I had to tell was strange, inexplicable and sad?"

I saw that the man was in earnest, that he was deeply moved, but I could not account for, nor could I scarcely believe what I had heard, and still I was satisfied this was no madman's tale. The speaker was sane beyond question. I was sorely puzzled. I essayed an apology for what I had said, when Kirschbaum interrupted me, saying soothingly:

"There, there, never mind. I have lost the brightest gem in the casket of womanly grace and beauty, and I lose my temper when I dwell on the horrors of that night. I have made myself quite ill by letting my anger get full rein. It is late; you had better go, and leave me to myself."

I was about to withdraw, when he said: "I have abused you, sir, but I have likewise honored you. To no other human being have I ever told that story, but I took a fancy to you as I told you yesterday, and broke the seal of silence. Think of me kindly, and forgive my indecorum if you can I am terribly unnerved. Good night."

I got very little sleep that night, and my theories and speculations only plunged me in deeper gloom than ever. I despaired of ever solving Kirschbaum's mystery, but I could not keep his story out of my mind. Thus two days passed, and I had made my plans for returning home on the evening train, when, as I was strolling in Madison Park, I met Mrs. Blossom, a lady whom I had known in Boston many years before. She had married Mr. Blossom in the meantime, and was now a widow. Like many other not over cultivated women she entertained a passion for literary and theatrical people, concert and opera singers, artists, sculptors, and persons of that ilk who gathered about her for several reasons, prominent among which were that she was a kind hearted, motherly woman, and a hostess withal, whose means enabled her to give regal entertainments. She had frequently invited me to her house, and once or twice I had gone, but had generally felt my unfitness to mingle, satisfactorily to myself, with the clever people who congregated within her hospitable walls, and I had decided not to go again. But Mrs. Blossom was very pressing, and finally she said: "Do stop over and come to my little party this evening." Then she named many persons of note who would be present, but I resolutely shook my head, and held that I must positively go home.

"Then you won't have no opportunity of meeting Miss Vaughn, perhaps 'll never see her, and she's all the rage."

I answered quickly: "Well, then, since you *will* have it so, I'll come."

As the reader may surmise I changed my mind in view of the suddenly opened prospect of meeting Kirschbaum's love. True, Mrs. Blossom had spoken of the lady as Miss Vaughn, but I had noticed a great many times before that Mrs. Blossom's pronunciation of "Miss" and "Mrs." did not vary. She Missed all ladies married or single even as she missed hitting plural verbs to tally with her plural nouns. But let us not cavil at her pronunciation or her grammar; her goodness of heart made ample amends for her partiality for two negatives and other eccentricities of speech, as well as for careless pronunciations.

I was not amiss in my calculation, and at ten o'clock that evening I found myself gaily chatting with my divinity of the Park. We talked with the utmost freedom and frankness, the disparity in our ages rendering it unnecessary that we should observe the little ceremonies common between young people in society. We spoke at length of Paris, and she listened attentively to all I said of the French capital, its arts, industries and architectural splendors. She hoped she should go there some day, she said.

"Go there again, I presume you mean," I observed, adding that I hoped she would find the city more quiet than in the old days of the Commune. She bestowed on me a puzzled look, but said nothing. Presently I continued: "Kirschbaum told me that strange, sad story. Perhaps I ought not to speak of the balloon mystery, but really I have studied over it so much I can scarcely think of anything else." Her puzzled look gradually changed to one of apparent fright, and to pacify her I concluded quickly: "Pardon me, Mrs. Vaughn, I can understand your feelings; it was indeed a most inexplicable and mysterious affair. The only pleasant thing in connection with it is the manly attitude Kirschbaum maintains. I can assure you and your husband—"

"My husband!" she ejaculated, in surprise, "why, sir, I have no husband, at least not yet," she said, blushing. "It is no secret in society, however, that I shall soon wed with Signor Feoretti, the tenor."

"It was my time now to ejaculate. "Not married!" I returned, "and who, pray, was the gentleman with whom I saw you riding in Central Park on Monday?"

"Why, my uncle, of course—Captain Peters of the Inman Line," she replied, "and who is this Kirschbaum?" she inquired, "of whom you speak as if he knew me. I remember no gentleman among my friends bearing that name."

"My dear Miss Vaughn," I said, respectfully, "I am all at sea. Somebody has gone out of his head—possibly I, peradventure another man, but things are getting queerly mixed up," saying which I wiped the beads of perspiration from my face which were exuding from every pore. "Pray pardon me, but may I ask who you are?"

"Somebody is certainly demented. All your talk about the Commune, the balloon mystery, and my going to Paris again was as a sealed book to me, but I let it pass, hoping we should flounder out of the maze shortly. As to who I am, I supposed Mrs. Blossom had told you. I am only an aspiring woman with a soprano voice which the critics say promises future distinction for me, and indeed, I have been very successful in 'Mignon.' It is not pleasant for me, as you see, sir, to speak of myself, (her sweet face was painfully flushed) but we seem to be drifting so hopelessly that I have answered your question in all candor."

As I turned to apologize I saw Kittredge on the opposite side of the room engaged in merry conversation with Mrs. Blossom. He had not seen me apparently, and I changed my position so that my face would not be visible to him, and said to Miss Vaughn:

"My dear young lady, you shall have an ample apology for what no doubt seems to you like rude conduct from a man old enough to have a proper regard for a lady—a fatherly tenderness, indeed, for a woman of your age, but before I say a word in explanation I wish to ask one more question. Will you kindly tell me if you ever saw that handsome, smooth-faced gentleman before who is talking with Mrs. Blossom?"

"Oh, yes indeed," she replied, "I know him very well."

"Oh, you do, eh!" I returned petulantly. "I dare say you do."

She looked at me reproachfully, and said very gravely: "We may as well agree to disagree. Your last remark was intended to be mysterious and I submit that you have no reason to annoy me further."

If I had been a younger man I believe I should have determined as I stood looking down into the pure depths of Miss Vaughn's angelic eyes, to cast the gauntlet at Signor Feoretti's feet, and enter the lists as a competitor for the smiles of her who held me spellbound with her graceful beauty. "But no," thought I, "all that is past for me; I am wedded to a memory, let me not add weakness, even in thought, to my palpable rudeness." After a moment I found voice to ask very meekly:

And who is this gentleman?

"I thought you knew him or I should have told you that before," she rejoined, half pityingly. "That Mr. John K——, the somewhat celebrated actor, who has just returned from Australia. He will play a round of old English characters soon at Wallack's."

"Have you known him long?" I pursued.

"Oh, yes," she said laughing, "since childhood. He is to be my brother—his real name is Silas Vaughn."

I felt faint and giddy, but soon summoned strength to ask if the gentleman was a man of veracity. She regarded me with a look of genuine sympathy as if by the quick intuition of her sex she had made a discovery, and said slowly, "Yes and no. He is truthful enough about matters of vital importance, but he sometimes lets his imagination run wild for amusement, and at such times I have heard Mr. Sothern say that he evolves such romances as to create the impression among his professional friends that he missed his calling in not going into fiction. I hope," she continued with a womanly sweetness that went to my soul, and which I shall never forget, "that Silas hasn't been—"

At this moment Signor Feoretti came up, and I stood one side, and as this soon to be united pair were temporarily engaged in conversation, I quietly passed through the throng to the lower rooms. Here, after donning my coat and hat, I [illegible] bade Mrs. Blossom an abrupt good night, and thence I proceeded to my hotel. And as I passed thither under the silent, solitary stars, I began to study upon a plan for the regeneration of those misguided ones of men who speak with most miraculous organ, but with an utter disregard of truth. I confess that I have not progressed well thus far in perfecting my plan, and every-day occurrences sometimes make me feel that I have not only entered upon my life work, but, if we are not without occupations in the next world, that I shall still have need for study and reflection, even after I have passed to where, "beyond these voices" all is peace.

Letters from Europe.

Since leaving Dublin I have visited the North of Ireland, including Portrush, a pretty little summer watering place, and the famous Giant's Causeway. I suppose you are aware that the formation of the stone at the Causeway is very wonderful, as well as strikingly grand and beautiful. The ruins of Dunluce Castle are about two miles west, and the rope bridge, called Carrick-a-rede, about five miles east of the Causeway. Crossing this swinging bridge, which connects a large rock or island with the main land, is one of the most dangerous feats I think I have ever accomplished. It's the shakiest affair I have ever attempted to walk over, and the slightest mishap would unquestionably precipitate you headlong into the seething, foaming waves which dash fretfully and with a dismal, monotonous moan against the base of the frowning rocks eighty or a hundred feet beneath.

From Portrush I took the steamer for Glasgow, and spent nearly two weeks amid the delightful scenery of the lakes and Highlands, seaside resorts, and larger cities of bonny Scotland. I was very much pleased with Scotland. Everywhere I found the people sociable, respectful, and extremely accommodating. Cradled amid a wilderness of hills, nurtured in the school of poverty, and early trained to hardship, the Scotsman is distinguished as an eminent writer remarks for his careful economy, love of liberty, unconquerable diligence, and enterprising ambition, but none the less for his kind and obliging disposition.

Edinburgh is generally considered to be one of the most picturesquely situated cities in Europe. Were you to see it as I did on a delightful morning from the top of Nelson's Monument on Calton Hill, you would readily admit this. I do not think that I have ever witnessed a more beautiful panoramic view. Beneath me, as it were in a valley, lay the old city of Edinburgh, and, farther round, the new. The glorious King of Day flashed upon me good humoredly, his beaming countenance heightening the effect of the picture, without making the weather so excessively hot as he is wont to do in America. Rising up in the distance rose the Castle, the residence of the early Scottish kings. At my left was Burns' Monument, and behind it Holyrood Palace and Abbey, underneath the pavement of whose choir lie "mouldering now in silent dust" the remains of many once loved kings and queens. Farther to the left I could catch a glimpse of the fashionable watering-place of Portobello, and, not far distant, of the extensive shipping port of Leith. Looking across the Forth there is a fine view of Fifeshire, or confining yourself more immediately to Edinburgh, you can see beyond the magnificent environs of the city. There is a large time ball on the top of the monument, which is wound up every day at twelve, and dropped by electricity from the Observatory, a few rods distant, at once. A cannon is also fired from the Castle at same hour. Near Nelson's Monument stands the National Monument, intended to commemorate the national triumph at Waterloo. It was built forty-seven years ago, and is after the model of the Parthenon at Athens. Only thirteen columns have been erected, however, at an expense, I understand, of over $5,000 each. The plan proving too costly, the National Monument is a failure, and has been nicknamed the National Folly.

To a person familiar with the history of the country, Edinburgh strikes me as being the most interesting place in Scotland to visit. There is great satisfaction in seeing the actual spot where events took place which have been written and talked about for centuries. I visited the apartments in Holyrood Palace, once occupied by the beautiful Mary Queen of Scots; saw her audience chamber, dressing and bed-room, and even her bed. Everything is as nearly as possible in the same condition she left them, although more than three hundred years have passed away. I also saw the room in which Rizzio, her luckless favorite, was murdered, with Queen Mary's private stairs in the solid wall communicating with her husband, Lord Darnley's suite of rooms on the floor below. This is the passage by which Darnley conducted the conspirators into the presence of his wife, and down which they dragged Rizzio's lifeless body. I saw the stains of his blood on the floor, which is still pointed out to visitors. It is said, you know, to be impossible to wash out the stains of a murdered person's blood.

Cold and deserted, with everything around suggestive of age and decay, these apartments, so full of historical associations, inspire rather melancholy reflections, but are, nevertheless, exceedingly interesting. Many a strange occurrence has been witnessed here, and these walls have echoed many a stirring scene. I saw the point where, about eight o'clock on Saturday evening March 9th, 1566, Queen Mary, with a few other ladies and Rizzio, sat at tea, when suddenly the private door opened and Darnley, followed by Lord Ruthven and other conspirators, all completely armed, entered the apartment. Darnley heaped reproaches upon Rizzio for his intimacy with the queen. The [illegible] that David (Rizzio's Christian name) should be taken. After some hot words Ruthven seized Rizzio, who cowered behind the queen. Mary did all in her power to save him, but he was pulled entirely out of the apartment and into an ante-room, where a number of his enemies had assembled. It was not their intention to straightway kill him, but to have him hanged the next day. But when, pale and terrified, he staggered into the room, one of their number, out of contempt, stabbed him with his dagger. Others did the same, and he fell with fifty-six wounds in his body. The queen in the meantime accused Darnley of having originated the treacherous deed, and pleaded with him not to harm Rizzio, all the while shedding hot tears. Darnley reproached her for her intimacy with Rizzio, and Ruthven attempted to pacify her, but nothing he said could please her. After Rizzio's murder, Queen Mary's aversion for Darnley developed into bitter hatred. She transferred her love and favor to Lord Bothwell, who afterward assassinated Darnley in a house opposite the College, and some months after Mary was married to him.

The Castle is built upon a rock which rises 383 feet above the level of the sea and its battlements towering above the city, can be seen in some directions for forty or fifty miles. It has experienced many vicissitudes. Its rugged and propitious cliffs have been scaled by daring adventurers and the stronghold taken after stout resistance. One [illegible] would seem to have escaped the hand of the heroic Kirkcaldy of Grange, by whom it was defended for Mary Queen of Scots in 1573 against the Reformers aided by a body of English, and only surrendered when the walls were in ruins, and the garrison in mutiny. Queen Mary's room, where she gave birth to James VI., is to be seen. I also saw the window out of which the youthful prince was lowered over that enormous precipice immediately after his birth, to prevent his falling into the hands of the enemy, by whom the Castle was then being stormed. Mary Queen of Scots, as you may be aware, was born in Linlithgow in 1542, and beheaded at Fotheringay Castle in 1587. While in Glasgow, I saw the warrant of Queen Elizabeth for her execution. The chirography is very poor, and appears to have all been done by Elizabeth herself. I could hardly decipher it.

I inspected the ancient Scottish Regalia, which are on exhibition at the Castle. Having been secluded from public view since the year 1707, they were opened for public inspection in 1817. The Regalia consist of the Crown, Sceptre, and Sword of State, and together with the Lord High Treasurer of Scotland's mace of office, and four additional ancient and costly jewels, are all enclosed in a kind of cage of upright bars. The yeoman-keepers strut about in the dress worn by the body-guards of the ancient kings of Scotland. The lower part of the Crown, which lies on a cushion of crimson velvet fringed with gold, consists of two circles of the very purest gold, chased and adorned with numerous precious stones, topazes, amethysts, emeralds, rubies and jacinths—between each of which is interposed an Oriental pearl. The upper circle is ornamented by small diamonds and sapphires alternately, and terminates at the top with knobs topped by costly pearls. This was the diadem as worn by Robert the Bruce. James V. added to it two imperial arches of gold crossing each other, and closing at the top in a mound of gold, over which rises a cross patee ornamented with pearls. The Crown, which is very elegantly formed throughout, measures about nine inches in diameter, twenty-seven in circumference, and six and a half in height. The weight is fifty-six ounces. The Sceptre is a slender and elegant rod of silver, about thirty-nine inches long, chased and varied in its form. The king ratified laws passed by the Scottish Parliament by touching them with the Sceptre in token of royal assent. The Sword of State is about five feet long, of beautiful and very elegant workmanship, the scabbard being of crimson velvet covered with filagree work and silver.

Short's Observatory, near the Castle, well repays a visit. For a small admission fee you can witness models of propellers, locomotives, and engines running by electricity, also water being pumped by the same motive power. At the top of the high building there is a camera obscura which faithfully reflects all that transpires in the neighborhood. Recruits were being drilled on the Castle esplanade for one of the Highland regiments when I was there. The spectacle was very fine, and I probably enjoyed the sight much better than I would had I been on the ground beside them in the hot sun. The Edinburgh National Gallery of Paintings contains many splendid pictures by famous artists, and is also well worth seeing. There is a very fine monument to Sir Walter Scott on Prince Street, also one to Prince Albert, as well as several of lesser note throughout the city. I have not seen a city in a long time that pleased me as well as Edinburgh. It is clean, bright, and cheerful looking, and contains some very handsome and stately buildings, many of them eight or nine stories high. I saw all there was to be seen, and then ran down on the train to Partobello, had a stroll on the sands, and returned in time to take the early evening train back to

Glasgow, which city I had left at 8:40 that morning. During the Scottish visit, I paid my compliments among other places to the famous Loch Lomond—a most delightful spot—Ayr the land of Burns, was in the humble cottage where the "Shakspeare of Scotland" was born, wandered

"'Mang the bonnie winding banks
Where Doon rins wimplin' clear."

and saw Alloway Kirk, the scene of Tam O'Shanter's marvellous encounter with the witches, and many other places immortalized in Burn's poems. I also visited Glasgow, and examined the Postal Telegraph office in that city, but as this letter is already long enough, I shall not say anything further on the subject until I write again. The weather has been somewhat damp during the past two weeks, but my health has been excellent, and I am very heartily enjoying my trip. I intend to remain at the seaside to "recruit" for about two weeks, and then expect to take a tour through England, and perhaps to the Continent. W. J. J.

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A Pleasant Letter from Ruddy.

NEW LONDON CT., July 1877.

DEAR OPERATOR.

During the past month our quiet little city has been honored by an influx of well-known telegraphers, in a manner quite unprecedented in its history. The occasion of their coming was nothing of a character savoring of a celebration or commemoration; we were having no "Telegraphers Ball," nor unvailing a statue of Morse, at least of the nature of latter day statues; but we were unvailing in a figurative sense what might be called a statue *to* Morse, (inasmuch as it embodies the perfection of his great discovery), viz: the Quadruplex.

Yes! we have really got the beautiful, mysterious, omnipotent, and complicated "quad" at last, with its concomitant terms of distraction, such as "rheostat," "polarized relay," "three point switch," condenser, and kindred specimens of telegraphic nomenclature ruinous to the teeth and begetful of profanity, while the poor stammering unsophisticated telegraphers essay their pronunciation. The introduction of the "quad" here, is, to a great extent, the reason of the above "influx." The first arrival was that of Mr. J. H. Hamilton, of New York, who, without assistance except from the office boys, put up the beautiful instruments and completed the connections in such skillful style, that it worked admirably upon the first trial.

The construction being completed, Mr. Gerritt Smith, also of New York, put in an appearance, subjected it to several "crucial tests," and pronounced the work perfect. These two courteous gentlemen and able electricians basked a day or two in the beams of gratitude's sunshine as radiated from the faces of Manager Woodbridge and his force, and left for Worcester and Norwich to put in the duplex at both places.

The lapse of a few days demonstrated painfully that for inexperienced men to balance a quad in bad weather is a work of no small magnitude, and the result was that that genial gentleman and accomplished telegrapher, distinguished alike by figuring prominently in the reports of the "New York Wire Club," and by professional achievements, Mr. M. C. Bagley, walked into our office and cordially greeted us. Staying with us several days, he guided us lucidly through the intricacies of the "quad," and balanced it with a degree of success only paralleled by the style in which he balanced his account at the "Crocker House," the hostelry at which he stayed. It seems that on the day previous to his departure, some person evidently unacquainted with the small salaries paid to operators, entered his room and surreptitiously purloined his ready cash, amounting to twenty seven dollars.

Bagley, whose board bill amounted to twenty four dollars, fortunately discovered his loss before liquadating his account, and at once acquainted the astonished host of his misfortune, at the same time threatening legal proceedings for its recovery. The host, rather than to allow such a course to be pursued, offered to compromise the matter by canceling Bagley's bill of twenty four dollars, a proposition to which the latter cheerfully assented, losing but three dollars. It has been strikingly noticeable that since this event, distinguished men have visited other cities instead of coming here, Pres. R. B. Hayes changing his destination to Boston, Pres. Orton sailing for London, and Grant revelling in the overtures of monarchical delights of other climes.

The last arrival, but assuredly not the least, is that of Miss Mary C. Salisbury, of the New York office, who will preside over the destinies of the Pequot House, summer office, during the season. The lady manipulates the key with a dexterity that is creditable to the fair sex, and has become deservedly popular in this vicinity by a refinement of manner which is pleasantly tempered with good judgment and absence of ostentation.

With this bright array of telegraphic cultivation, gentility, and beauty, as personified by Messrs. Hamilton, Smith, and Bagley, and Miss Salisbury, we feel justified in making the statement that our city has been honored by an unusual influx of well-known telegraphers.

And now a word about the "quod."

By those who have visited our office in past years, the introduction of the "quod" will certainly be admitted to constitute a memorable epoch in its history.

Where formerly registers, reels, weights, old desks, and kindred relics of infantile science stood, are now to be seen beautified by their ornamentation of glittering brass, polished wood, and flashing steel, three new and elegant quartette or "four-in-hand" tables. The boys are in high glee over this mark of progress and appreciate it highly. Manager Woodbridge interprets the introduction of the "quad" as a compliment to the office and business of the city, and dwells with rapture on the theme, as he lucidly explains the *modus operandi* of the intricate instrument to curious customers.

It was just about the time of the completion of the "quod" here, that I read the invitation of your Nevada correspondent, "Coin," to hie me to the far west and revel in the spray of the dashing cataract. I was awaiting with much concern, as my boots needed tapping, a response to your interrogatory: "How are the roads west of Chicago?" when a veritable bonanza presented itself to me in the joy that pervaded the New England operators over the acquisition of the "quad." They were fervent with glorious enthusiasm.

They were intoxicated with glee, and as intoxication, whatever may be the cause, develops a generosity akin to lavishment, it was a simple matter to borrow any amount of them. I seized upon the golden opportunity. From manager to messenger, from foreman of repairs to patrolman the same lavish spirit was manifested, and in five minutes after broaching the subject I had effected a loan of $200 to send me west. I slept peacefully that night. Entering the office the following morning with lithe spirit, I was startled by the haggard looks of all present—the "quad" worked badly—couldn't balance it—wet morning—couldn't find the right holes in the rheostat to fill.

Evidently the enthusiasm of the day before had subsided, and the wild light that dwelt in every eye, coupled with but feebly suppressed profanity, conjured within me the thought of how terrible must be the death of one who fell into the clutches of this crowd at midnight—in the woods—alone—with no revolver—a mile from the nearest house.

I entered to bid them adieu ere setting out for Nevada, but I was constrained to be silent in the presence of such misery and despair.

My suggestions to "change that plug from the 1,000 ohm hole into that of 500" was treated with mockery and jeers, and only enhanced the already fervent and exploding bitterness.

One operator becoming recollective of the loan of $200, replied, tartly, "We will not change that plug from the 1,000 to the 500, but we will take that 200 from the plug that now fills the space before us." There was no mistaking his tone nor the looks of approval that the others gave to the demand, and as I reluctantly restored the borrowed notes I mused on the uncertainty and fickleness of friendship, and I did not strive to restrain my right foot as it raised with startling velocity and rushed in the direction of the operator who had thus thwarted me, and came into awful contact with him as he stood with back turned toward me. I rushed from the office to avoid hearing the awful shriek that followed, but even above the quadruplex and ten sounders I could hear a wail of despair and then all was silent. I have postponed my trip west, and am waiting for better men and better times to come to my aid. RUDDY.

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Would a Duck Swim

TO THE EDITOR OF THE OPERATOR:

Will you please give your opinion on the following subject: Would the A. and P. Company alter their present attitude, still further reduce it, if we [illegible] and [illegible] it? Yours respectfully, [illegible]

ANSWER.—Would a duck swim?

The Telephone—A Way Duplex.

TO THE EDITOR OF THE OPERATOR:

Mr. Gray's peculiar system consists of sending musical tones along the wires by means of a vibratory current which opens and closes through a transmitting reed, and this intermitting or pulsating current is received upon a relay, the armature of which is a reed or spring, firmly fixed to one core of a horse-shoe electro-magnet, the reed vibrating at the same rate as the sending instrument. Why? Because it is a law of tones that the same number of vibrations in a given time will invariably produce the same tone, and conversely the same tone when produced in any manner will give the same rate of vibrations. A local translates this into Morse characters.

Some weeks since a wire was placed at Mr. Gray's disposal between Chicago and Milwaukee, and a series of experiments were made by Mr. Gray and his assistants, which resulted in duplexing the line on a system depending upon the power of an intermitting current to override or work independently of the Morse circuit, while the latter is being used on the same wire. Its success was complete, and for three weeks the two systems have worked harmoniously side by side, making a perfect and clear duplex.

Subsequently Mr. Gray asked and received permission to test the working of this duplex system upon a longer and more difficult circuit, and the W. U. Co. granted him the use of their hardest working wire—that between Chicago and Indianapolis, he proposing to give them one or more way offices between the termini, and a through telephone circuit. This was accomplished with perfect success, Lafayette using the ordinary Morse instruments with Chicago and Indianapolis, while Chicago and Indianapolis worked the telephone or tone instruments, independently of the way offices.

Then it transpired that as Lafayette had more business with Chicago than Indianapolis, it would be more convenient if the wires could be duplexed to Lafayette, and Indianapolis made a way office. This new problem was submitted to Mr. Gray, who accepted the challenge, and the circuit now stands thus:

Chicago has a thorough current with Indianapolis, and can at any time work with that office or Lafayette, while Lafayette or Indianapolis can work with each other, and, at the same time, while either two of these offices are working together, Chicago and Lafayette (on two other instruments) can be doing business without the least interference, all this being done on but one wire.

The advantages of this system over any other known plan of duplexing a wire are succinctly these:

1. Each operator does his own breaking, as in the ordinary Morse circuits.

2. Simultaneous transmission in either or both directions, and a wire may be made to serve as both a through and way wire; as, for instance, a railroad line, which is often kept busy with way business, train orders, etc., may be supplied with any number of offices, while all offices necessary can be placed on the through instruments, and thus one wire be made to do double duty in every respect. A full description would require too much space, without cuts. I can only say this much, that the plan is a perfect success, is now in actual use, and that Mr. Gray has his several rights fully protected by patents. Until very great improvements are made by other scientists, Prof. Gray is unquestionably ahead on duplex telegraphy. G.

LAFAYETTE, IND., July 18, 1877.

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NEW BRANCH RAILROAD.—The Chicago & Northwestern road has commenced laying the track for a new branch road, from a point a short distance west of Carroll to Onawa, a station on the S. C. and P. Road, about half way between Council Bluffs and Sioux City. They expect to have the road completed to Onawa this summer, and it is said they intend to extend it into Nebraska next year. The new branch will be called the Maple River R. R., and will intersect the rich farming and stock raising country between the C. and N. W. and Illinois Central railways.

THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

August 1st, 1877.

DURING MR. JOHNSTON'S ABSENCE IN EUROPE correspondents will please address all matter for the literary department of the paper, personals, items of news, etc., to Joseph Christie, P. O. Box [illegible] Philadelphia, Pa.

Subscriptions, orders for books, etc., or in connection with THE OPERATOR Purchasing Agency, and all business communications generally, as well as New York City items, to W. J. Johnston, Publisher, P. O. Box 3332, New York, as usual, to whom Post Office orders, drafts, etc., are to be made payable.

WE have the pleasure of laying before our readers to-day an extra-sized number of THE OPERATOR, notwithstanding which considerable matter has been left over for our next issue.

AMONG other places, THE OPERATOR is regularly on sale in this city at the corner of Broadway and Liberty Street, at the corner of Broadway and Fulton, in front of the Western Union Building.

THE A. and P. reduction in salaries of nearly 20 per cent. is to be "contingent upon a falling off in the receipts," or another reduction in rates.

WE desire to call the attention of our readers to the conclusion of John Oakum's "Marion Scudder" in this issue. Mr. Phillips ably sustains his well won reputation by his last production.

THE excursion of the Baltimore Telegraphers to Annapolis, on the 9th inst., will be a most enjoyable affair. This and the excursion of the Erie Telegraphers are the events of the season.

THE profession should not forget that THE OPERATOR is the only independent telegraph paper in the country. We have studiously avoided any suspicion of vanity, by omitting to repeat the praise which is frequently showered upon us; and, as we have no occasion to complain of the patronage accorded us by the profession, we call attention to our own excellence as a circulating medium for no other reason than to remind every operator that the columns of the only paper in the country which will support his rights are freely opened to him. At the same time, we hope that our correspondents will not be swayed in any manner by official frowns or favors on the one side, nor by [illegible] of fancied wrongs on the other.

"He were no Lion were we not Hinds."

Before going to press with our last issue, we received a great many communications setting forth that the Atlantic and Pacific Company were about to make a tremendous reduction in salaries. We did not print them, simply because we were loth to believe them, but now that we have proof that such is the intention, if not the fact, we are reluctantly compelled to make the announcement. This reduction, it is generously stated, is to be limited to a certain period of time, and is also to be proportionate to the falling off of the receipts—"falling off of the receipts" at a time when, if the business were properly managed, "falling off" would be an impossibility. This arithmetical proposition implies that if in July and August rates are reduced from 25 to 15 cents, the operators will have to contribute the odd ten cents on every message. Now, if the order said that if in those two months the receipts came up to the average, there would be no reduction; that if in those two months the receipts should prove so much below the average, there would be a corresponding reduction in salaries; but if the income should prove so and so much over the average during that period, there would be a proportionate increase in salaries, we might then be able to see through it. But this is the least objectionable feature of the matter. We are aware now that when, at a time when unemployed operators were to be found in every corner of the land, and this company astonished us by advertising for men, it was only "feeling the market." By the number of replies it was ascertained just how many unemployed operators there were in the country; and basing a calculation on the number of idle ones, it is now deemed safe to attempt to turn a screw or two on the workers. The thing has been neatly figured up, the order has gone forth, and now this crack company, all covered with gold and silver spangles—this great benefactor to the public—reduces its employes in this year of bounty; and that, too, at a time when the largest crop which the country has ever yielded is being harvested, and when every indication points to a most prosperous season for trade.

We do not expect that merely mentioning the matter will be productive of an improvement in this state of affairs; for, when men once close their eyes to every consideration but the immediate and temptingly large returns which such a system of balancing accounts yields them, they are forever blind even to their own interests; but it will be interesting and profitable for operators and the public to ascertain just where *their* interest lies. It is well known that the telegraph business of the country is as great, or even greater now than ever before, yet we are to listen to a rig-ma-role about a "temporary" reduction *if* the receipts should fall off. It must be plain to those who have no faith in disinterested benevolence that there is no "if" in the matter at all, but that the receipts *will* fall off; for what with building additional lines to out-of-the-way places for which there is no present use or necessity; what with grinding out and footing bills for useless old tin-can automatic inventions which are practically useless, diving headlong into disastrous lawsuits, assuming gigantic leases, and reducing tariffs to such ridiculous figures as cannot possibly pay, there must ultimately be a doleful shaking hands with extreme economy and pauperism. The next step in the down grade, after this, is a mad hunt for the very cheapest kind of labor, which is ever thriftless labor; and here again greed defeats itself, and the public suffers. This is management; this is "opposition"—the mystic word whispered by Mephistopheles in the ear of his confiding friends; and the logical inference must be that the system laid down in the affairs of even a second-rate corporation which admits of this kind of "management" is necessarily a bad one. It is, however, a problem for the telegraph managers themselves to solve. If they are content, for "economy's" sake, to risk the interests of the public and confide its secrets to vagabond "cheap" operators—the lazzaroni of our profession—they are, of course, entitled to do so; but they should, in all fairness, notify the unsuspecting public of that determination. At all events, one point is clear: Men who are incompetent have no right to indulge themselves in wild competitive struggles, since in doing so they not only thrust their chances of misfortune upon those *depending* on them, but also upon those *confiding* in them; while their selfishness precludes all hope of the victim's having any possible share in the profits which might accrue from such an unlooked for event as the success of their thin and clumsy manœuvres.

Let them look now, and as their devastating order goes forth, like the revocation of the Edict of Nantes, they will see the sterling Huguenots of our craft wandering sadly away from their usual haunts, and seeking a Veii in the wilderness of other professions. There is no law to remedy this evil. We are told, after incapacitating ourselves from all other labor by a faithful and life-long attention to their interests, that if we do not like it, we can go. There is no help for it. Our lawgivers have statutes to provide against the common pickpocket and the highwayman; civilization has provided means for alleviating the miseries of shipwreck, conflagration, and pestilence, but from grasping parsimony, or the results of extravagant zeal, from the secret and disastrous operations of the cobra-heads and adders of the Rialto there is no protection, save in what the instinct of self-preservation may dictate to the unhappy victim. Luckily, however, like scorpions, they sting themselves, or if left long enough alone, they will drink their own poison.

Some people may wince under an honest statement of the case, but the man who goes about the world with a chip on his shoulder, daring everybody to knock it off, must expect to come down once in a while. To such as think we do them injustice, we say they need not fear, since the sting of a reproach lies only in the truth of it—no truth, no sting. It would be as well, nevertheless, for all parties to remember the old truism, that a river, even in its greatest flood and fury, can never rise higher than its own source. One conquest tempts to another, and at last the conqueror begins, from sheer force of habit, to raise tempests to drown flies, and the last tempest he raises is the one that sweeps him away. Xerxes, with a million of men at his back—men swarming round him in whole nations, a mighty host that dried up broad rivers merely in quenching its thirst—once felt so powerful that he had the sea lashed with chains, because it would not divide to admit of the passage on dry land of his triumphant host; yet, in a short time thereafter, he was glad enough to escape in a small row-boat across the waters choked with the slaughtered bodies of his ten hundred thousand warriors. It was once the proud boast of the notorious Jim Fisk, when at the height of his power, that he could compel the city of New York to change its name to Fiskville whenever the whim seized him. Tweed, tremendous in his might, mockingly asked: "What are you going to do about it?" But he received his answer on Blackwell's Island. All these men have realized, as others must now, that the battle does not always go to the strong, and above all, that designing men never dig so deep but that truly honest ones may "find other measures to undermine and defeat them."

Crocodile Tears.

The Western Union official organ, *The Journal*, weeps on hearing the fate of the A. and P. employés—not because it loves toiling telegraphers more, but the A. and P. less. We, as operators, feel extremely grateful for this exhibition of sympathy; but it seems to us, coming from such a source, like a mild dose of what is known in our unclassical but expressive vocabulary, as "moonshine on a shovel"—something too ethereal, something too diaphanous, for ordinary men to grasp. We have laid the flattering unction to our soul, however, but there is an under-current of unreality about that kind of drill which reminds us of the speech of Sergeant-Major Owdenthwaite, of the British army. The gallant Sergeant-Major was putting his men through the drill for a "firing party" for a dead comrade. He opened the ranks so as to admit of the supposed funeral cortege, and ordered the men to "rest on their arms reversed." Then, to give them a better understanding of the coming ceremony, and by way of practical illustration, he walked slowly down the line, saying, "Now, I am the corpse—pay attention, I am the corpse, mind." On reaching the end of the line, he turned and surveyed his men with the eye of a professional undertaker, and immediately after remarked in a solemn voice: "Your 'ands is all right, your 'eads is upright, your fire-harms is reversed, your hofficers is model soldiers, everything is in order for a military firing party; but, somehow. you 'aven't the look of respect for the corpse that you hought to 'ave."

Civil War.

The present anxiety of two telegraph companies to annihilate themselves for the good of the public has never been equalled since the days of the accommodating Hank Smith, of Kalamazoo, Mich. Hank was a carpenter by profession, and ran on the old Whig ticket for the office of coroner, his competitor being one Ike Driscoll, a plasterer. They were the only two candidates available, and party feeling became intense; but the day before the election, the carpenter, poor Hank, owing to his excitement, fell off a building, and killed himself. By this self sacrificing deed he not only insured the election by a walk over to his rival, but at the same time he furnished Mr. Driscoll with a corpse—his own remains—to commence operations upon as coroner.

MORAL. Don't let your zeal in competition lead you to take a mis step.

Ave Cæsar Morituri te Salutant.

Apropos of cheap rates, there is now a well founded rumor that the Atlantic and Pacific Telegraph Company will reduce the pay of its operators and other employés for the month of July and August by docking them five days' pay each month. This reduction amounts to about 20 per cent., and it is understood extends from the President down. The reason assigned is the general reduction in the price of labor and the light business during these two months. The order has not yet been communicated officially to the employés.

Echoes from 197.

Where's that soap?

Mr. Hallock has gone to Saratoga for the season.

Ed Kearney has returned from a four weeks' vacation in the west.

John Moreland is getting stout, and wears his hair cropped *a la Heenan.*

Mr. Lebaugh has been "helping out" at the Erie depot during the prevalence of the strike.

Mr. Thompson has resumed his summer labors again. During the winter he studies at Yale College.

Mr. Shroff of the Associated Press has been doing some extra work for the company during the past fortnight.

Paul Sheehan during the past six months, has developed into one of the best operators on the night force.

Walter Richmond has been appointed manager of the ship news office, *vice* J. W. Woods transferred to Fire Island.

Patsey Kelther, for the past two years a clerk on the night force, has risen to the dignity of an operator, and now works 59 south.

George Sawyer has been transferred to the day force, and wafts his elegant "Morse" on some of the heavy western circuits.

Mail Agent Holmes takes great pleasure in narrating his war-like experiences while at Albany with the Ninth Regiment last week. "You ought to see 'em run when we got there!"

Wednesday, July 18th, there was handled at this office during the regular working hours, 45,000 messages and 250,000 words of press; of the latter, 30,000 were sent to "Boston and Way," 30,000 to the "State," 20,000 to the "Western," and about an equal amount to the California Press.

The night diary of a certain press wire, last week, after narrating at some length the breaks and annoyances to which the sender had been subjected, closes as follows: We may expect these men to join the other members of the striking fraternity, as they are decidedly superior break-men."

Mr. Bogardus, familiarly known as "Bogy," has finally turned his back on telegraphy, and was at last accounts traveling through Central Pennsylvania, expatiating upon the merits of a certain patent soap, one cake of which, he declares, in the pocket of a shipwrecked man, is sufficient to "wash him ashore."

Miss Louise Rossman has resigned, and leaves for California August 1st to accept a situation in San Francisco. Miss Rossman is an excellent operator, a refined and cultivated lady, and enjoys the respect and admiration of all who know her. She has the best wishes of a large circle of friends for success in her new field of enterprise.

Sam Welp, the only member of the operating force ordered out by the recent call of the Governor for troops, returned yesterday, apparently well pleased with his brief soldier experience. His regiment, the ninth, was stationed at Albany, and Sam reports they were everywhere received with enthusiasm and good feeling.

The fire in this office on Sunday evening last was occasioned by the wires of two heavy quad batteries coming in contact, which igniting, instantly enveloped the whole switchboard in flames. For a time serious consequences were threatened, but prompt action on the part of the night force soon rendered any outside assistance unnecessary. The operating room this (Monday) morning presented an appearance gloomy in the extreme. Instead of the bright, handsome piece of machinery which had been the pride and ornament of the office, nothing remained but the charred and blackened remains of the most perfect switchboard ever manufactured. Business was only slightly delayed, and by ten o'clock everything was being handled with its usual promptness.

Themes for the Thoughtful.

Men give away nothing so liberally as their advice..

We have more indolence in the mind than in the body.

Nothing tends more to make us ridiculous than the endeavor to imitate our superiors.

The age of chivalry is gone, and one of calculators and economists has succeeded.

That man will never be proud who considers his own imperfections and those of human nature.

A good word is an easy obligation, but not to speak ill requires only our silence, which costs nothing.

Judge thyself with a judgment of sincerity and thou wilt judge others with a judgment of charity.

Friendship is like those ancient altars where the unhappy and even the guilty found a sure asylum.

Dastardly men are like sorry horses, who have but just spirit and mettle enough to be mischievous.

He who reforms himself has done more toward reforming the public than a crowd of noisy, impotent patriots.

The seat of pride is in the heart, and only there; and if it is not there, it is neither in the look nor in the clothes.

Deceit and falsehood, whatever conveniences they may for a time promise or produce, are, in the sum of life, obstacles to happiness.

These written laws are just like spider webs; the small and feeble may be caught and entangled in them, but the rich and mighty force through and despise them.

There was never yet a philosopher that could endure the toothache patiently, however they may have writ the style of gods, and make a pish at chance and sufferance.

Laws are emanations from the self-poised character of God; they radiate from the sun to the circling edge of creation. Verily, the mighty Law-giver hath subjected Himself unto laws.

Men love better books which please them than those which instruct. Since their ennui troubles them more than their ignorance they prefer being amused to being informed.

All the worth of some people lies in their mighty names; upon a closer inspection, what we took for merit disappears. It was only the distance which imposed upon us before.

An intelligent class can scarce ever be, as a class, vicious; never, as a class, indolent. The excited mental activity operates as a counterpoise to the stimulus of sense and appetite.

Our remedies oft in ourselves do lie,
Which we ascribe to heaven; the fated sky
Give us free scope; only doth backward pull
Our slow designs when we ourselves are dull.

If you have talents, industry will improve them; if you have moderate abilities, industry will supply the deficiencies. Nothing is denied to well directed labor; nothing is ever obtained without it.

A dull man is so near a dead man that he is hardly to be ranked in the list of the living; and as he is not to be buried whilst he is half alive, so he is as little to be employed whilst he is half dead.

People do not care to give alms without some security for their money; and a wooden leg or a withered arm is a sort of [illegible] upon heaven for those who choose to have their money placed to account there.

When we have practised good actions awhile they become easy, and when they become easy we begin to take a pleasure in them, and when they please us we do them frequently. Thus, then, the habit of doing good.

The Thorsdale Telegraphs.

How much of a headache I had on that important day which was fraught with hopes for Thorsdale I can not exactly determine. I could not stay at home, but took a scramble along the rocky shores of the lake. From time to time I heard the booming of a big drum and the blare of trumpets, which, I suppose, came from the German Silver Orpheans, and not unpleasantly did it sound in the distance. That all this hubbub was in Mr. Thor's honor I felt tolerably proud, and had they fired off a salvo of cannon I should have enjoyed it. Toward evening I found myself on Thor's Rock. Just as the sun was setting I heard a loud steam whistle, then three lusty cheers, and a most vigorous pounding of the drum, which told me of the departure of the train of festival makers. I confess I felt sorry that it was over. There I watched the setting sun, amid the crimson clouds, build a purple city afloat in the sky, floating in a sea of gold. As it faded out I thought of Thor the city somewhat, and of Thor the telegraph operator more; and next I had the good, hearty cry which had been threatening to come on for the last two days. Then naturally commenced a process of self laceration. There was no use in denying it, I cared a good deal more for Jahn Thor than I did for his impossible town. I was too sure of that, and what was more degrading I could not help it. I felt that I had no business to remain in Thor, and that I had the best of excuses for leaving the place. A position in the office would be fraught with disasters, and in a moment of carelessness I might be the cause of sending a whole train of cars to destruction. It was a place for a man, and not for a woman. Thorsdale would have to get along without me. And Mr. Thor? Well, in time—time does so much—I said I would forget all about them both. Go away I must, and the sooner the better. So ended my court martial, and taking a last look at the lake, with a very proud and stiff gait, holding my head very high though it was splitting with a genuine headache, homeward I marched.

"Thor was here an hour ago, Miss Mary," said my hostess, "and seemed kinder disap'inted like to find ye went. He's brought a killin' lovely cake, with a sugar steam-engin' atop of it trimmed with flowers. The children has been hiving around it like flies; likewise a bottle of wine. I do so hope you're a temp'rance girl. Sakes! what a lot of men 'ts has never drew'd a sober breath since they left Smoilersville, all a hollering themselves red in the face. Them kind of cakes, they say, is good to keep, and this un might do for your weddin'. Cl'ar out there, you children, and let Miss Brown have some showing at her cake. It's mighty hard to keep children's fingers from picking at the frosting."

"Please divide the cake among your little ones," I said. "I am not feeling very well. Would you oblige me very much by not letting any one disturb me? I want rest and quiet."

"Souls alive! and are you as bad as that? Ketridge must have hurt you wusser than you will allow." I felt really too wretched to make a reply, and retreating to my room, went to bed. I went to sleep, feeling dreadfully broken down, and dreamed that I wandered all night through gloomy thickets, picking flowers out of Bass's ale bottles, which all turned to thorns and pricked my fingers.

CHAPTER III.

Next morning I took a roundabout way to the office. There were two doors to the station, one of them close to my closet. I looked in and saw Mr. Thor, with his head supported on his hands and his tawny hair streaming down. I coughed purposely, but there was no answer. I passed in and opened the door of my little room, and uttered a cry of surprise at its altered appearance. It was decorated from top to bottom with garlands of flowers. To suspend the festoons of leaves, nails had been driven into the walls, and so smothered were the engravings with greenery that they were completely hidden. Stephenson, however, being partly on the ceiling, still held his own. My ale bottle was gone, and was replaced by a pretty little *jardinière* filled with ferns and creepers. The map of Thor, where was it? I searched for it in vain. At last I found it, torn and crumpled and thrust ignominiously into a corner. I quickly had the map in my hand, and smoothed it out, and, in order to replace it, mounted on a cracker box, which did duty in my boudoir as an ottoman. My lugging about this piece of furniture, I suppose, awakened Mr. Thor from his reverie.

"I'm so glad you have come, Miss Brown," I heard him say. "I wanted to have some person to condole with, after yesterday's asinine proceedings. I hope you are well again. That accursed band, how it must have disturbed you. I had almost a fight with Watkins; he wanted to have the whole concern stationed under your window. 'See the conquering hero (or heroine) comes,' played on a big drum and ophicleide, would have given you a brain fever. I never was so irritated in my life. I tried my best to keep them out of your room in the office here, but could not. I suppose they have decorated it. The young man who took your place yesterday, and the Smoilersville lady, undertook the business. I have not looked at it."

"Pray look in, Mr. Thor," I said, half-amused at his solemn and abashed mien. "It is indeed a perfect bower, now. How I have merited all this kind attention, I cannot divine." He stood at the door a moment, and glanced around.

"That map is strangely out of place," he said, after a pause. "Away with such nonsense! I am well over it all, now;" and here he made a step toward coming in.

"Please do not. Please, Mr. Thor. Some one threw the plan into the corner; has torn it, I am afraid. I took the trouble to hang it up again."

He stopped just then, as with outstretched arms, both of my hands holding fast to the sides of the door, I barred the entrance.

"If it stays there," he said, bitterly, "it must be a constant reminder of as stupid a folly as a sane man could have been guilty of. Why keep it? Thor, with its paper streets, its mock avenues, its sham distances!"

"Pray cease, Mr. Thor. Is not this room mine, at least for the present?" Here I locked the door. "What did the railroad people determine about the place? Did they promise anything?"

"Yes," he replied, gloomily, "they have decided on a cattle-shed."

"A cattle-shed!" I exclaimed, concealing with difficulty my own chagrin and disappointment. I recovered myself quickly, however, and added, "A cattle-shed! That is something, much better than nothing. Some—some of the greatest cities of antiquity, you may remember, owed their foundation to a cattle-mart."

"Allow me to correct your history for once. Rome's great forum, when Rome became nothing, was degraded to a cow-pen."

"It is worse than folly to draw any parallel between Rome and Thorsdale. A cattle-shed! Why, that is just what was wanted!" Following the lead of my sanguine temperament, I went on tumultuously: "Wise, practical railroad men! A cattle-shed means drovers and butchers, men from Maine to Texas, with fat, greasy wallets. It means a hotel, a bank, a market, an exchange, a printing office, a newspaper, a church, a Sunday school. It means paved streets and sidewalks. It suggests a mayor, aldermen, lawyers, doctors, speculators, politicians. It means a wharf and steamboats, and timber rafts, and a light-house perched on Thor's Rock, shining of nights across the lake. It means that at last the nucleus is found, providing you only believe it as I do."

Mr. Thor seemed to stagger for a moment under my load of words, and then said, "Miss Brown, you look honest. It would be the most cruel thing in the world, if you gave utterance to anything you did not implicitly believe."

"Mr. Thor," I replied, with conviction, "though women at my age are prone to romancing, I give you my honor that I have pictured nothing which I do not believe may be accomplished, providing you will work manfully toward the end in view. Please reach me down the map," I added, unlocking the door.

"What for?"

"To locate the cattle-shed."

"Here," he said, after some pondering over it, "is an unoccupied place. We cannot decide on these things hastily. Now, a cattle-shed must be on the outskirts, near an abattoir. Think of mad steers straying round and goring all the children in a populous city."

"How far is this unoccupied place from here?" and I put my finger about where the telegraph station stood.

"At least a mile and a half," he replied. "Consult the scale."

"It is impossible," I remarked, in a most decided way. "The town must creep before it can jump. It ought to be right here, close to the depot."

"Out of the question. My real depot, not the one cpposite here, is fully three quarters of a mile lower down the road. Just where you want the cattle-shed to be is the site of my opera-house, in the Quartier St. Germain of Thor."

"You are impracticable. Cattle arrive by rail, tired, thirsty and jaded, and you want to drive them almost a day's journey farther on. The map of Thor must be remodeled. Who constructs the plan of a battle before the action is fought?"

He gave way slowly, though with good grace, and it ended by my taking a pencil and marking a place for the cattle-shed.

"There, that will do," he said. "It is only on paper, after all, and I am sick of paper towns." And with this he pitched the map into the corner. "But tell me about yourself. Are you quite well, now?"

"Quite well, and so much obliged to you for sending the cake and wine. Has the Smoilersville paper come by the early train?"

"Yes—it—has."

"Pray give it me. I want to see myself, for once, dead and buried with all the honors."

"I tore the paper into bits in a rage. They made me a Cicero as to eloquence; they put into my mouth a pack of stuff I never was guilty of; they—"

"What! anything else?" I inquired.

"Yes, a lot of absurdities in the worst possible taste, about you."

"About me? Since you have told me thus far, you must tell me all."

"You insist, then?" he asked very gravely.

"I certainly do. Whatever the stupid paper may have published, I am quite indifferent about."

"But I am not," he quickly added. Just then a train came in, followed by more trains; and conductors, engineers, expressmen, and brakemen came into the office. I had to be formally introduced to all of them, and as they all shook hands with me, and did it vigorously, by the time they were through my arm felt as if it had been dislocated. At last we were quiet, and then my resolve came uppermost in my mind, and I vowed that, when the clock struck eleven I would speak my mind.

"Mr. Thor," I said, as the clock ceased sounding the hour, "believe me, it is with some regret that I am forced to resign my position here. As incidents like those of the other night might repeat themselves, it must be apparent to you that it is a man who is wanted here, and not a woman. In fact, you intimated as much to me, and you were perfectly correct." I felt that I was doing what was right. I awaited his reply. Very quickly he said—

"I have expected this, Miss Brown. Although the chances of a repetition of the accidents of Tuesday are very slight, there are other reasons which might make your stay here exceedingly distasteful to a young lady of your worth and character."

It was my turn, now, to open my eyes in astonishment. "Other reasons? I do not understand you."

"Yes," he replied, "other reasons. Jahn Thor has no right to have your name coupled with his."

"How? What do you mean?" I gasped.

"Simply this, and let me assure you how much I regret it. The foolish paper stated that I was your accepted suitor, that we were to be married—"

I would hear no more. Snatching up my hat, I burst out of the office, went home, immured myself in my room, more wretched than I had ever been before in my life, but resolved that I would leave Thorsdale that evening. It was five o'clock when my landlady knocked at my door, handing me a telegram. One of Mr. Thor's depot hands had brought it. I tore it open. It was a message from my sister, with the address of a neighboring town on the line of our road, advised me that by seven o'clock she would be with me. I felt that it was almost providential.

"Miss Brown," said the man from the depot, "Mr. Thor says, as soon as the lady comes I am to bring her to you."

"Is there a train that leaves about nine o,clock?" I inquired.

"Yes, Miss; only one, the express up train at nine forty five."

"You will thank Mr. Thor for his politeness."

"That's all?"

"Yes," I replied.

I now made up my mind that it should be by the nine forty-five train that I must go. I knew I could prevail on my sister to retrace her steps with me.

The good sister came on time, and I rushed down the stairs to meet her. "You see, Mary," she said, "it was our vacation. Now, I had no liking to your becoming famous all alone by yourself. It is such an exceedingly trying position, especially for a child like you, to be famous, you know, and so here I am. You are nervous and trembling, my little woman. What has gone amiss with you?" Thereupon, without exactly going into details, I told her something of my three days' experiences in Thorsdale. With her keen insight into my character, she understood me at once.

"Well," she said, "we had better go away at once. I am not a bit tired; are you ready for a start?"

"Yes, quite ready."

"You will go home with me. When winter fairly sets in, provided you won't help me in teaching, you might make another start. There is a night train back, I suppose?"

"Yes, the nine forty-five."

"Then it is all settled. Thorsdale! what a name for a place! It does not sound Christian-like. It is a heathen name, is it not, Mary? I must rub up my mythology."

At just half past nine, we were at the station. "I must bid him good-by," I said to myself; "I cannot leave without doing it. I might never forgive myself if I did." Taking my sister's arm, I knocked at the door of the telegraph station. It looked dull and cheerless within. A single lamp was feebly burning in the room. Mr. Thor was there, with his head buried in his hands. The door was open. My sister, peering into the darkness, and ignorant of the locality, did not seem to like venturing in, and she loosed my hand. I felt that I must go alone, and bid Jahn Thor good-by. "Mr. Thor," I said, almost inaudibly—yet I felt sure he heard me—"I have come to bid you good-by, and to say God help you;" and I stretched out my ungloved hand toward him. Perhaps it was so obscure that he did not see me, as I stood in the shadow. He did, though, turn toward me suddenly. His eyes seemed to devour me, then he put his finger to his lips, and, pointing to the telegraph instrument before him, slowly, softly, almost noiselessly, commenced working it. Did I listen? I hung on each feeble sound as if my life depended on it, and this is what it said: "Mary, do not leave me without knowing that I love you dearly." Then it ceased. Next, both my hands were clasped tight in his strong hands, and he kissed me, and then the express train thundered in.

. . . .

"You seem terribly agitated, child," said my darling sister, as we left Thorsdale; "and where did you get that shocking ale bottle from, with the flowers in it?"

Jahn Thor—my Jahn Thor—had given me the flowers. I had begged them of him. He had kept the train back for fully five minutes, in order that he might find the old flowers and the ale bottle in the saw-dust hill where Miss Eusebia had undoubtedly thrown them. Then I told my sister all about it, from beginning to end, and she said, kissing me, that I was "a silly child." But she cried, and we both cried, and after awhile we went to sleep in each other's arms, and, though the Thorsdale road was a terribly rough one, then, I slept much more sweetly than I had done for the last two nights.

Of course I married Mr. Thor, six months afterward.

. . . .

And what about Thorsdale? Thorsdale has a cattle-shed. New York and Chicago quote our market. We have now rows of houses, some of them with stone fronts. We have five churches and a synagogue, six clergymen and a rabbi, ten lawyers, eleven doctors, and seventeen dentists. We have three hotels, and—to think of it!—suburban cottages. We have had a horse race, a robbery, a divorce, a terrible fire, and municipal peculation. Are not these the attributes of a thriving town? We have a daily paper, The Thorsdale Tripod. Mr. Thor says the name is a good one, as it supports the editor (the former reporter of The Smoilersville Sentinel) by means of its brass, brains, and blarney. That editor's principle business is, of course, to scatter cinders on the devoted heads of the Smoilersvillians. His last leading article was entitled "Delenda est Smoilersville."

I wish I was quite certain that I did not feel, myself, that spirit of rivalry which is, I am afraid, inherent. I am, however, asserting only what any one may see in the last census, which is that Thorsdale had then exactly fifty nine souls more than Smoilersville; as to Twoboysboro, we distanced her more than three years ago. Mr. Thor, the Honorable Mr. Thor, has just returned from the Centennial Exhibition, where he acted as one of the judges. He was in Norway last year, and we expect every day our second body of honest, sturdy Scandinavian folk; the advanced corps came to Thorsdale more than two years ago. We both of us cried like babies when we saw the steamboat filled with our Norwegian people come sailing from out the shadow of the lake, up to Thor's Light. I did so wish, then, that my children's grandfather had been alive.

Mr. Thor still makes carefully executed plans of Thorsdale, and I help him. It was but yesterday, when looking at the old map which once decorated my closet at the telegraph station, that I said to my husband, "Do you not think that some of those new extensions of streets might be assimilated to the original plans? I wish you would study it up; you entirely neglect the dear old map."

"Nonsense, Mary," was the reply, 'let us be practical. I notice with some regret that Thorsdale is assuming a certain floridity of style which is ridiculously out of place. The architect who has made the plans of the Thor House estimates that monograms, a T and an H interlaced, over every window, with sea horses rampant, will increase the cost of the front decoration some thirty-five hundred dollars. Now, though such ornaments might make people remember us, it would be the landlord of the hotel, or the guests, who eventually would have to pay for them."

"But did you not promise me a fountain, after my own designs, to be put up in Thor Place this year?" I asked.

"Before we get to fountains, we must look the fire-plug question squarely in the face. The poetical Camelot had no city gas-bills to worry over, and what did King Arthur care for paving or grading?"

"And Asgard?"

"Dear old woman, just seventeen years ago a cattle-shed knocked Asgard on the head. You made the cattle-shed possible, Mary, and I thank God for it."

(THE END.)

All About a Telegram.

A lady on Mill Street was confronted by a boy from the telegraph office the other day with a message fro her, and handed her an envelope containing the same.

"What, boy, a telegram for me?" she exclaimed, as she took it from his hand.

"Yes, ma'am."

"Good Heaven, boy! Are you sure that it's for me?"

"Yes, ma'am."

"Oh heavens!" she continued, as there upon the envelope, in the bold hand of the operator, she beheld her own name written in full. "Yes—yes—'tis so—'tis so."

"Yes ma'am, I'm sure that it is for you."

"And from Philadelphia, too?"

"Yes ma'am."

"Then it must be! He has been killed, he has been killed!"

"What ma'am?"

"Oh, boy! Run—run—quick—quick and call Mr. Day—Mr. Day—Mr. Day!"

The boy half frightened and half perplexed ran across the street and found Mr. Day busy at work in his garden, but after explaining to him that something terrible must have happened to his neighbor, he quickly left his work and ran over, to find the lady weeping and wailing and wringing her hands in the front yard where the boy had left her.

"Good Gracious, Mrs. Excitable, what has happened?"

"Oh he's dead, Mr. Day. I know it—I knew that if he went to the city so often he would sometime meet with a terrible accident. To think of it, leaving me and my helpless family in this cold cruel world all to ourselves, Oh, I can't—I can't—stand it!"

"Why madam, what on earth has happened?"

"There is the telegram. I know what a telegram means. People never telegraph unless something terrible happens, and I know that that is not his style of handwriting on the envelope! Oh—o—o."

"But, madam, you have not opened the message yet," said Mr. Day, examining the envelope.

"I knew it, sir. O—o—o it will kill me."

"Shall I read it?"

"Yes—yes—you can," added the weeping woman in a trembling voice, burying her head in her hands.

Mr. Day tore open the envelope, and to his surprise found in it the following message from her husband:

"I have just found a bargain for an elegant silk dress that I should like to see you in. There are three of the same quality, one of a drab color, one of brown and one of purple. Which color would you prefer? Telegraph at once and I will bring it home with me this evening.
HUSBAND."

"Why, Mrs. Excitable, your husband is not dead, he wants to know what colored silk dress you want."

"What! not dead?" cried the nervous woman, springing to her feet and grasping the message from his hand.

"No, madam, read."

She read the telegram, and as she went into the house to answer it, said in a snappish manner, "Well I do think he was mean to frighten me so by sending a telegram in another man's handwriting?"—*Exchange.*

Give it Up.

CAIRO, ILLS, July 6, 1877.

EDITOR OPERATOR:

Let us give it up. The handsomest man, like the lamented Charlie Ross, turns up almost everywhere. We have seventeen candidates here. G.

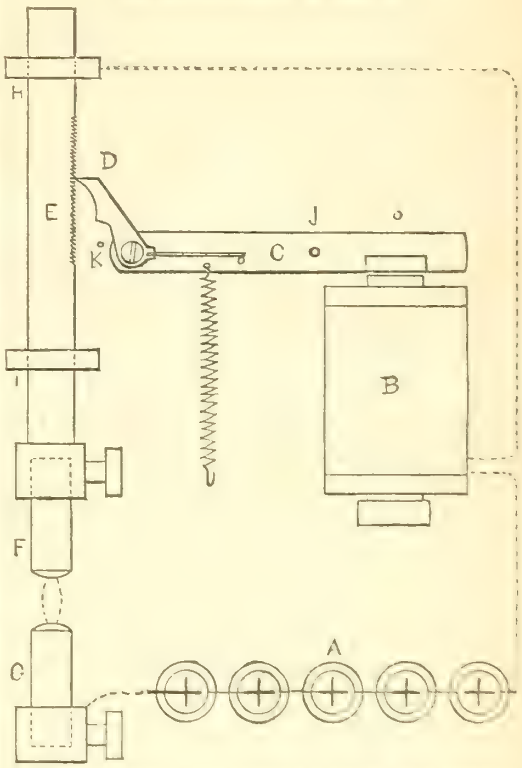
Scientific Department.

[This department is under the charge of Mr. H. Van Hoevenbergh, 115 Broadway, to whom all communications pertaining thereto should be addressed. Mr. Van Hoevenbergh will cheerfully answer here any queries pertaining to electricity, magnetism, or kindred subjects.]

ELECTRICAL MEASUREMENT.

V.

ELECTRO-MECHANICAL MOVEMENTS.



This movement was devised for use in an electric lantern, for the purpose of keeping the carbon points at a proper distance apart, and also for feeding them, or one of them, when burned away by the action of the current.

A is the battery, of about forty or fifty cells Grove or Carbon; B the electro-magnet, wound with but a few turns of very coarse copper wire. C is a lever, pivoted at J, and bearing a pawl, D, at one end. E is a slide, moving freely in the supports H and I. F and G are carbon points.

The circuit indicated by the dotted lines being closed, the lever and armature C are attracted, and the pawl D, slipping into the notches lifts the support E, thus separating the carbon points, the current jumping from point F to G, and keeping the circuit closed. Should the circuit be opened by the burning away of the carbon points, the lever C will be pulled back by its spring, and the pawl thrown back from the saw-teeth by coming in contact with the pin, K. The support, E, being left perfectly free, slides down until the carbon points touch each other, when the whole operation is repeated. This is done so rapidly, that only a very slight interruption in the continuity of the light is noticeable.

The carbon connected to the [illegible] pole of the battery will be burned away faster than that connected to the other. The [illegible] pole should, therefore, be connected to the movable carbon, F.

[illegible]

A method of measurement that requires the use of the battery for only an instant at a time, [illegible] lows the needle to remain in the coil, and that renders a carefully divided scale unnecessary, would seem to be simply perfect. All of these advantages are realized in the use of the Wheatstone Balance or Bridge, as it is sometimes termed.

Its nature may be easily understood by studying these engravings.

Fig 1

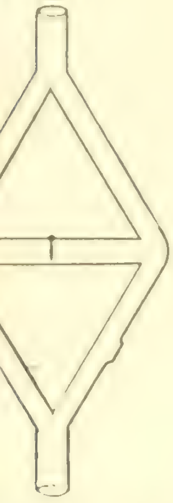
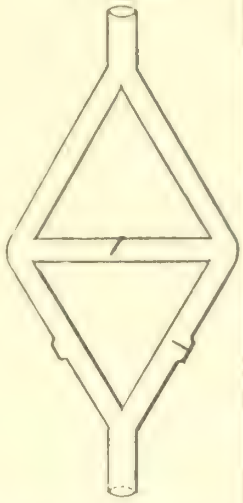
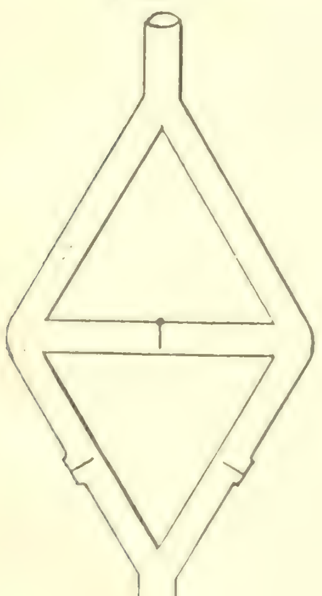


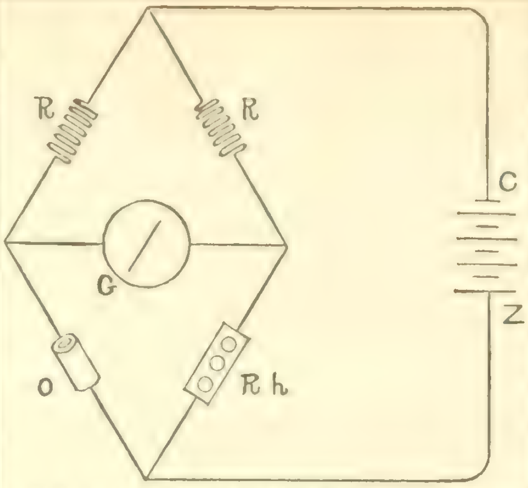
Fig 2.



The arrangement shown in Fig. 1, consists of two glass tubes, joined at their upper and lower extremities, and also connected by a cross tube, which contains a valve, hung loosely, and retained in its place by gravity. Suppose this to be connected to a continuous water supply that will keep it filled, with some pressure. The water will then enter at the top, divide at the fork, and the tubes being of equal calibre, the same portion will pass down each side, re-uniting at the junction of the tubes. The cross tube will be also filled with water, but as the pressure will be the same on each side of the valve, the latter will not be moved, but will hang downward as before. Now, if an obstruction be placed in the lower part of one of the side tubes, as represented by Fig. 2 a portion of the water will be "backed up" through the cross tube, and will divert the valve, swinging it to one side. Now, if another obstruction, as for instance the end of a foot rule, be introduced on the opposite side, the valve will partially regain its original position, and if it be made to obstruct the passage of the water to the same extent as in the other tube, the valve will again hang downward as seen in Fig. 3, as the pressure on each side of the valve is again made equal. This illustration will greatly assist in comprehending the operation of the Balance as shown in the next engraving.

Fig. 3.





C Z is the battery; G the galvanometer, O the object to be measured, Rh the adjustable resistance, and R R two small equal resistances. The object of the smaller resistances is to divert a portion of the current through the galvanometer which would otherwise be cut out.

If the object to be measured be inserted at O, the rheostat Rh cut out, and the circuit closed, the galvanometer needle will swing to one side, as the resistance of the rheostat side of the circuit is so small that a great part of the current coming from R passes through the cross wire and galvanometer instead of going through the object. If a resistance exactly equal to the object be now unplugged in the rheostat Rh, no current is observed in the cross or Bridge wire, and the needle returns to the zero point. The route of the current is then as follows: Starting from the copper pole of the battery, the current arrives at the top of the diamond where it splits, one half going each way, past the cross wire, through the object (or on the other side through the rheostat), to the junction of the two sides, and so back to the zinc pole.

This method of measuring resistances is particularly adapted to the galvanometer described in Art. 2, as will be shown in the next article.

* * *

A Gossipy Letter from Chicago.

Chicago, July 16, 1877.

To the Editor of the Operator:

The improvements in the Western Union operating room are about completed. The floor, which was very uneven, has been levelled up, and a new hard white maple one laid on top of the old pine affair. The walnut wood-work that adorns the switchboard has been oiled and burnished, until it shines like McRobie's new silk hat. The windows in the ventilating shaft have been lengthened, and they now reach from the floor to the ceiling, giving much better light to the gentler sex who labor on the Metropolitan wires, which have lately been switched on new tables in that part of the room. The corner once formed by a brick wall, and a partition which divided the operating room from the book keeping department, now consists of a large or rather three large iron pillars, bolted together, which support the roof by means of large oaken girders in place of the brick wall and partition which have been removed. The room is now nearly as large again as formerly. Rooms have been secured in the next building west, for the book keeping department, access to which is had from the elevator hallway on the fourth floor. The ceiling of the enlarged operating room has been tastefully frescoed, and the walls have been tinted a shade darker than the pure white of the ceiling. Mr. W. O. Hopkins the genial chief of repairmen here comes in for a full share of praise in this respect. Of course it was planned by Supt. Col. Wilson and Manager Maynard, but "Hop" has carried out their plans with such exactness, that it reflects credit alike on him as well as them. Since the improvements have been going on, Mr. Maynard has had his desk moved into the Gold and Stock Room, adjacent to the operating room.

Chicago still keeps up its reputation for changes in its operating force. Our old friend, Mr. James Doody, is with us again from the sunny South. Prominent among the many recent additions to the force are Messrs. Chas. H. Davis, I. V. Jones, Boyle, Barley, Downs, McReynolds, Kane, Wild, Kinneman, [illegible], [illegible], and Burrows. Mr. John [illegible], who has been up on the northern shores of Michigan, superintending a railroad, has returned, as the climate proved too severe for him and he is now on the day force. Mr. O. M. Stone has taken the all night trick, made vacant by the transfer of John Smith to the regular night force. R. H. Lord, has not been able to be on duty very much recently, on account of his eyes troubling him. Mr. Tillotson also has been on the sick list from the same cause. Mr. Howard Tillotson has been added to the army of book-keepers in the Western Union main office. The place made vacant among the ladies by the recent marriage of Miss Lizzie Veazey to Mr. J. W. Stone has been filled by a younger sister of Miss Veazey, who has heretofore been in one of the American District west side offices. Mr. A. L. Baker who has been away on a two months' vacation, has just returned, looking as fresh and sweet as new mown hay.

The boys had their equilibrium considerably disturbed recently by a report, which seems so far to have been unfounded, that Sunday extra work was to be abolished, and that the day men would have to take turns working on Sundays, the night men working seven hours without extra compensation.

Among the recent additions to the Western Union operating force are those of Miss Fannie Wheeler, Miss Snell, and Miss May Dickerson; and also Messrs. Malcolm McCulloh, of N. Y.; W. J. Lloyd of Iowa, one of the rising young attorneys of that State; and Mr. Largay, of Omaha. Mr. Lincoln was at last accounts lying very ill of typhoid pneumonia, at Logansport, Ind. Chief operator Drake, of Omaha, made a call at the W. U. main office as he passed through this city on Saturday. Mr. Gerritt Smith, of New York, is in the city on business.

The meetings of the Chicago Electrical Society are gradually growing in usefulness, the membership having been largely increased. At the last regular meeting Mr. F. W. Jones was elected President; Mr. N. S. Stevens, Vice President; Miss Jennie Fox, Treasurer; and Mr. C. W. Jones, Secretary. At a special meeting held a few weeks ago, Gray's musical and Bell's speaking Telephones were exhibited. The large and commodious American Electrical Society's room and the Associated Press room were thrown into one, and they were literally packed with an appreciative audience. Prof. Elisha Gray did the honors, assisted by Mr. F. W. Jones and the Chicago Electrical Society's quartette club, who proceeded to an adjoining building, and sang over the Bell Telephone.

The American District are extending their boundaries very rapidly under the efficient superintendency of Mr. Roger B. Pearson. Miss Kelly, a sister of Chief Operator Kelly, of the W. U. Co., is the polite and obliging cashier of the general office. Mr. Samuel Smith, Jr., manager of the A. & P., this city, has gone into other business. Mr. B. H. Sunny, who has so long and acceptably filled the position of night manager for that company, has been appointed manager. The appointment gives universal satisfaction. Notably among the recent appointments at the A. & P. main office in this city is that of Miss Kelly, another sister of Charles Kelly, of the W. U., as Receiving Clerk.

Our friend Charlie Allen continues to pound brass, while Mrs. A. (*nee* Miss Allie Ward) is busily engaged on the first principles of the culinary art. *Apropos* of their marriage, the following was handed to our Chicago general agent for publication, but was mislaid at the time:

To [illegible] life,
His [illegible]
And [illegible] with [illegible] a wife
His watchword ever be [illegible] "All is well."

A number of old-timers and some of the best operators in the country are to be found among the A. and P. force here. Mr. Beidler, of the W. U., desires "Viola's" address.

Occasional.

* * *

Telegrapher's Frolic.

The telegraphers of Baltimore city have chartered the palace steamer Samuel J. Peltz, for a moonlight excursion on Thursday, August 9th. They will leave pier No. 3, Light Street wharf, at 7 P. M., sharp, steam down the beautiful Chesapeake Bay as far as Annapolis, and stop at "Holly Grove" on their way back. There will be dancing on the boat, and also at the Grove, the Fort McHenry band having been engaged for the occasion. Invitations have been extended to telegraphers in the neighboring cities, and the excursion promises to be a grand success.

* * *

There is a paper in Natchez Miss., called the *Daily Telephone*, and Prof [illegible] is writing a book to be called "The Telephone."

From Western Pennsylvania—The Western Union and A. and P. Companies.

PITTSBURG, PA., July 9, 1877.

TO THE EDITOR OF THE OPERATOR:

Telegraphic matters at this place not having been reported for some time, I thought you might accept a letter containing a few notes of changes, etc.

In the Western Union, John Torrence has once more returned (from Cleveland this time), and fills the place in the oil room made vacant by Tom Egan going over to the A. and P. Dick Ledwith has gone to Wheeling to take report while Bender rusticates in the classic precincts of Butcher's Run, Allegheny, for a few weeks. Mit. Goewey, who has been working at Red Cloud Agency, Nebraska, for a year or more, was called home by the death of his mother, and does not intend to return, but will work extra here. D. E. Moreland has been appointed fourth day chief, and Dick Salyards, from the Harrisburg wire, nights, takes his place on the St. Louis circuit; while Bob Murdoch, who has been promoted from Associated Press boy, fills the vacancy on the night force left by Salyards. Eitemiller has gone to Parker's, Pa., where he and Talcott at the Parker end, and Paul Bossart and Jim Coulter at the Oil City end, make the duplex howl.

Over at the A. and P. the changes have been numerous. A gentlemanly operator alights from a freight train, slides down to the office, works a week, gets money enough to continue his journey, and then "Ho for the land of the setting sun!" Owing to this manner of proceeding, it is impossible to keep run of all the arrivals and departures. Forman ("Fattie") has been working nights for several months; as has also Hibbets. Bogges has gone to Cincinnati for the same company, and, as mentioned above, Egan, from the W. U., is with the opposition. Fred. Willner, of Oil City, and Wesley Case, of this place, have traded off. Saybold, late of this (A. and P.) office, is now manager at Parker. The A. and P. here always appear to be able to hire more men, and for that reason, probably, it is bothered considerably by "birds of passage." One of them, an individual calling himself "California Jack," and mentioning, among other things, that he took report for fifteen years without breaking, is at present browsing around town.

The base ball game at Oil City, on June 2d, between a nine of Pittsburgh telegraphers and one of the former place, resulted in victory for the oleaginous individuals by a score of thirty-three to thirty, in six innings. It is hardly necessary to say that the playing was brilliant in the extreme. A grand dinner given to the visitors by the home club wound up the proceedings.

MAGRUDER.

How W. Scruggs got his Check Cashed.

BY TOM QUAD.

William Scruggs was "a fust class man," as he himself expressed it. He had, however, a fondness for various alcoholic beverages which it pains me to chronicle, and owing to this fact and others which evil disposed persons were wont to say greatly militated against him, he frequently transferred his services from one place to another upon short notice. He reached the "model office," 197, and put in about seven days' time before the dawn of pay-day morn. It happened that he celebrated the advent of that happy commingling of Christmas, Fourth of July and New Years' by making a night of it with the Sunrise Club, and turned up, voucher in hand, rather late in the afternoon to draw his pay.

The cashier took him in benignantly over his double distorters, and remarked pensively that the gentleman must be identified.

Now, W. Scruggs had never been set back in this particulr manner before, so his jaw dropped a trifle as he said, rather gruffly:

"This is me!"

"ut B, sir, I do not know you."

"That's me, you can bet!"

"But, sir——"

"Never heard of Bill Scruggs?"

"Never! You must be iden——"

"Iden——. Look here, blank me. What are you givin' me, Jim? When I was in Callao——"

"You must——"

"In sixty, I was goin' to say——"

"You can get no money by talk, sir. If you don't climb out of that and bring some one that knows you to be the person herein named——"

"I tell you this is me. I've signed "Sq" ever since Skemmy and I——"

The remainder was lost in the bang of the glass window, and the clerk turned and disappeared through an inner door. William waited an hour or so, and then spent the night without the door, "laying for the fakir as sassed him."

Fire at 197.

On July 29th, about twenty minutes to six o'clock a dense volume of smoke was seen issuing from the windows on the west side of the sixth story of the Western Union Telegraph Building, 197 Broadway. The engines were soon rushing from every direction within that fire precinct to what, at one time, was considered the commencement of a great conflagration; but, owing to good fortune and the sensible precautions the company had provided, the first wild flames were soon extinguished. The cause of the fire was, properly speaking, neither the result of accident nor that of the carelessness of any person. It was one of those incidental circumstances in the operation of a great enterprise that imparts a lesson of experience. For months the same wires had been laying side by side, or strung near and crossing each other in the performance of their individual work without a jar or anything to indicate that there was a wire out of place, but suddenly sparks of electricity united, and the flashing flames came in contact with a portion of the woodwork of which the switch was constructed. Fortunately the full force of the telegraph operators were at work, and the moment the blaze was discovered Mr. Kennedy, the night chief, called every operator to the hose, and a stream of water was instantly directed against the switch where the ignition had taken place. Before the Fire Department could get their hose up the stairs and put into operation, the fire was under control.

Altogether the conflagration could not have continued more than a few minutes, probably not more than ten minutes at the utmost; but the dryness of the woodwork of the switch and the abundant draft of air from open windows sent the flames exerywhere with abundant rapidity, and soon 600 wires were twisted into every conceivable shape and rendered utterly worthless for future use. The switch destroyed is a systematized combination of all the wires issuing from the chief office to every part of world, and as it was looked at—after the fire—charred and blackened, their was something like a sentiment of pity for it as that experienced for an unfortunate thing of life.

The superintendent, right in the midst of the fire, ordered the business on the table to be gathered up, and operators were immediately sent to Jersey City and Harlem, where the great bulk of the work could be despatched.

The damage will amount to about $10,000.

Punctuation.

Everyone knows, or should know, that there are two kinds of language, namely, spoken and written. One of the most important elements of written language, as we understand it to-day, is punctuation. Few persons, comparatively speaking, thoroughly understand it. To prove this assertion, it is only necessary to observe carefully the messages handed over the counter of any large telegraph office. The meaning to be conveyed is plain, but no regard is paid to punctuation. Operators, therefore, can scarcely be blamed for paying little or no attention to this matter in the transmission of business. Good judgment, however, might be exercised by them in the handling of press reports. Much time and labor is lost in the making up of press dispatches, simply because no care is taken to punctuate correctly. Capital letters, periods and commas are misplaced, or more frequently omitted, giving rise to innumerable errors, many of which find their way into the newspapers every day. Richard Grant White expresses the opinion that incorrect spelling is not necessarily an indication of ignorance, and, on the ground taken by him, it may be assumed that bad punctuation is not evidence of illiteracy. It must be remembered, however, that proficiency in the arts of spelling and punctuation is proof of a certain amount of culture. Shortcomings of this character are quickly detected and are apt to create false impression.

In ancient languages, such as the Egyptian and Assyrian, no marks or points are used to show clearly the relations of words and sentences. With the exception of a few arbitrary signs they are joined together in continuous lines. The system used to-day, and which answers all purposes of composition, is that adopted by Manutius, a Venetian printer of the sixteenth century. It applies to nearly all European languages, as well as to some Asiatic and African dialects, with slight modifications.

A little study and practice will enable anyone of ordinary intelligence to master the art of punctuation, which may justly be considered a literary accomplishment.

STANLEY.

A Sensible Note.

PARKHAMSTED, CONN., June 12, 1877.

DEAR OPERATOR:

Did you ever think that if there was a dividing line in this world, that it was drawn between the fraternity usually known as Telegraph operators, and the commercial and social community? An extended acquaintance with the former, and a few years with the latter, has made the comparison one of the most striking to me, and I cannot but think that the high tension of the nerves necessary in rapid manipulation and penmanship for such long periods without rest, act as a stimulant just so long as in constant employment; but once free from this excitement the nerves relax, and thus we are thrown back into the worlds usually with a lack of energy; and it is for this reason why we do not, as a general thing, seek other employment.

An eminent physician, when asked why it was that so many Telegraph operators drink, replied, that laboring under so much excitement while working, there was always a kankering for this excitement, and it was usually found in stimulants. In this way we can probably account for the habit of drinking among men who are suddenly thrown out of employment altogether. My conclusion is, that this unhealthy excitement, brought on by continuously straining the nerves, is productive of the same results as other stimulants. There must be a counteraction sometime, but when both are indulged in, the result is not surprising. Temperance is more essential with us than we might at first think.

ANTI-CLICK.

Presentation to an Old Telegrapher.

A pleasant little affair took place at San Francisco, Cal., on the evening of May 30th, when a number of the friends of Captain John Curran, recently elected Superintendent of the Fire Alarm and Police Telegraph, met in the Twelfth District Court room. Major James A. Laven, an old Telegrapher, called the meeting to order, and introduced His Honor Mayor Bryant. His Honor, in a few well chosen words, presented to Captain Curran, on behalf of his friends, a magnificent gold and silver star, elegantly enamelled and inscribed, as a token of their esteem and confidence in his skill and ability to conduct the office with benefit to the city and credit to himself. Captain Curran replied briefly, returning thanks for the testimonial. Nearly all of the members of the Board of Supervisors were present, as also were a goodly number of "the fraternity" representing the W. U., A. & P., and Railroad offices.

After the presentation a generally good time was had.

From Kentucky.

[illegible] Ky., [illegible]

In the Western Union office, Mr. Geo. A. Carpenter is chief, assisted by Messrs. [illegible] and [illegible]ley. F. H. Sanderson, nights. There has lately been an addition to the W. U. force, in the shape of a young "Carpenter," first edition.

For the A. and P., Mr. Will Carpenter, assisted by Pink Samuels, of [illegible], does the [illegible], and they are making it "hot" for their rival, the W. U. To say that Will and Pink are enterprising business men, good operators, and [illegible] gentlemen, is but to re-echo the sentiments of all who know them.

P. and F. R. R. Mr. P. Stewart, Master of Transportation and Train Despatcher, works the [illegible] through a circuit of [illegible] miles, and is loved and respected by all of his [illegible]. Mr. S. is an old timer, and for a neat legible copy cannot be excelled. The [illegible] [illegible] was in the [illegible].

You will find Walter W[illegible] at the key during the night, [illegible] [illegible] at a speed that would astonish many an older man than he. He is Mr. Stewart's right hand bower, and a [illegible] young man.

[illegible]

Government Telegraphs in Foreign Countries

The International Telegraph Company at Berne, Switzerland, has at last published the statistics with regard to European telegraphy during 1876. Out of the sixteen states whose transactions are brought under notice there are eleven in which the gross earnings of the telegraph system are insufficient to cover the working expenses. Arranged in the order of the percentage of deficiency these states are Denmark, Norway, Belgium, Germany, Austria, Hungary, Greece, Portugal, Holland, Roumania, and Spain. In the case of the three states first mentioned the deficiency is less than 15 per cent. For the remainder it ranges up to 58 per cent. Sweden shows a profit of 6 per cent., Switzerland of 12 per cent., France of 18 per cent., Russia of 19 per cent., and England and Italy of 25 per cent. each.

As regards extent of business England is far ahead. But the English are disappointed that the profits are not sufficient to pay the interest on the capital employed in buying out the telegraph companies and developing the system.

Comparing the number of inland messages with the populations of the respective countries, it appears that for every 100 inhabitants there were transmitted in Switzerland 77 messages, in England 58, in Holland 38, in Belgium 36, in Norway 27, in Denmark 22, in France and Germany 19, in Italy 16, in Austria-Hungary 12, and in Russia 37. A large part of the Swiss messages are sent by non-residents.

Switzerland heads the list as to the comparative number of offices, having one for each 2,664 inhabitants; but many of them are at hotels only used during the tourist season. England comes next with an office for each 5,840 persons. The rest come in the following order: In France, 8,462; in Germany, 7,980; in Austria-Hungary, 11,556; in Italy, 15,522; and in Russia 50,188. Holland, strangely enough, appears, if the figures can be trusted, to have the least provision of offices among all the European cities, having only one office to every 115,449 inhabitants.

In making a comparison between different countries, as regards the average expenditure per message transmitted, it must be remembered that this cost is considerably affected by the extent of the territory of each particular state. Other things being equal, the working expenses will be higher in a country in which the average distance traversed by a message is 250 miles than in one where the average is twenty-five miles. Accordingly, Russia is found at the top of the list in this respect, with an average expenditure of 3s. 2d. per message. Among the medium-sized states the cost per message is: In Spain, 2s. 4½d.; in Austria-Hungary, 1s. 5¼d.; in Norway, 1s. 4½d.; in Germany, 1s. 0¾; in France, 1s.; in England, 11¼d.; in Italy, 10½d. Of the smaller states, Roumania, with an average of 1s. 8½d., comes out least favorably; while the most cheaply worked systems show the following average rates of expenditure per message, viz.: Holland, 10¼d.; Denmark, 8¼d.; Belgium and Switzerland, 5¾d. each.

On the 31st December, 1876, the Western Union Telegraph Company operated 191,948 miles of wire, and 7,439 offices. During the year 1876 the company transmitted 19,446,697 messages. The gross receipts were $10,048,979, and the expenses $6,611,947. The average tolls per message were about 50 cents; the average expense for transmission about 33 cents. The total number of offices in the United States is about 12,000. There were transmitted by other companies than the Western Union in the United States about 3,000,000 messages, the gross receipts from which were about $1,500,000. In addition to the number of miles of wire operated by the Western Union Company mentioned above, they operated about 40,000 miles of "phantom" wire—that is to say, imaginary wire created by the duplex and quadruplex apparatus. The quadruplex system is nowhere used except in the United States, and here only upon the Western Union lines.

Mr. Prescott, electrician of the Western Union Company, views the comparative merits of the European and American systems as follows:

"A comparison between the cost of the work in the two countries shows that it is done most cheaply here. The tolls average less in Europe. A consequence is that there the governments controlling the business get no return of interest in the investments, and sink $3,000,000 to $7,000,000 a year. One explanation of the superior cheapness of our system is that we get about three times as much work out of our employes as they do. In New York we handle on the average 31,000 messages a day with 300 operators. In London they handle less than 40,000 with about thirteen hundred operators. In Germany and all Europe the operators do about one fifth as much as ours. We pay a little more than double the average European wages. We are able to do as much on one wire by the help of the quadruplex machine as on four wires without it. We also do much more on the Morse machine than they do. We send 2,000 messages on the quadruplex from New York to Chicago in twenty-four hours. Three hundred a day is considered a large business in Europe. We have also the best printing system."

An Interesting Letter from the Oil Regions.

OIL CITY, PA., July 1st, 1877.

DEAR OPERATOR:

I should like to give you a few lines from the Oil country, which may be of interest to your many readers. This place now ranks as the second or third office in the State with regard to receipts. Being also a repeating office, an enormous business is handled.

The force is one of the best in the country. The office is in charge of W. A. Steveley, one of the best natured, as well as best business men in the employ of the Western Union Telegraph Co. The wires are in charge of Frank Ross. The force comprises the fellowing gentlemen: James B. Coulter, Paul W. Bossart, A. H. Babb, E. A. Keene, Jr., J. P. Keene, Frank Ross, L. A. Langworthy, Harvey Rathburn, B. D. Steveley, and Messrs. Skelly and Miller. L. N. Hamilton is our lightning bookkeeper.

We work a quad and three duplexes. The quad to Parker, Pa., 45 miles south of here, is our heaviest ckt. and the numbers frequently reach 1,000 both ways with Parker, which will give an idea of the amount of business handled, and I need but mention the names of Talcott and Eitemiller at either end to prove that the oil business is "*pushed*" *promptly*.

Mr. Coulter and Babb are the regular men on the quad here, and two better could not be scared up. No exceptions.

The N. Y. Duplex, working to the Petroleum Exchange, N. Y., is also going to be a hot circuit. A few weeks ago we were visited by a delegation of Pittsburg telegraphers for the purpose of playing a friendly game of base ball. The victory was ours. The score ran rather high, and has slipped my memory, but the boys seemed to enjoy the trip, and returned to the smokey city, expressing themselves well pleased with the hospitality of the Oil City boys. A return game is to be played it Pittsburg soon.

The A. & P. Co. are also doing a lively business here. They work duplex to Parkers. Messrs. Drake, Hughes, Case, and Gist see that things don't spoil.

The office is under the management of Mr. Dickson, who is well liked. This point is pretty well represented by telegraphers, being a railroad centre. Ed. Keene was made a happy man a few weeks since, by being presented with a fine boy, weighing 8½ pounds. "Looks just like his Pa," they say.

A new Oil Exchange is in course of erection, which is to be a fine affair. Our new office will also be very handsome. Some of the most influential men in our oil trade here are ex-telegraphers; among them are: Jimmy Lowe, Myron Bettis, Ed. Foster, Jim Hughes, Gus Stevenson and Abe Irwin, all of whom, in years gone by, manipulated the mystic key.

GREAT LEATHER.

A Telegraphic Joke.

On the night that Commodore Vanderbilt's will was telegraphed to the press, after the despatches had all been received and delivered at Rutland, and the night telegraph operator, who is very zealous for his reputation as a news gatherer, was about leaving his office, he was aroused by the click, click, click of New York calling Rutland, as though the very existence of the Western Union depended upon his being answered immediately. "What's up?" hurriedly responded Rutland. "Codicil Vanderbilt's will, just in; most important part of it, you want it sure." Telling New York to hold on about two minutes, Rutland snatched his hat and rushed over to tell the night editors to wait until they had received the most important part of Vanderbilt's will, which was just coming. Then rushing back to his instrument, he carefully prepared a sheet of manifold and told New York to give him the codicil, which the latter did as follows: "He wills his hat to the city of New York for a reservoir; and his nose to the Delaware and Hudson Canal Company for a fog-horn."—*Burlington (Vt.) Free Press.*

Dashes Here and There.

New Haven, Conn., is going to connect her public schools with telegraph wires.

Advantage of having lady operators on the day force. They don't come around six times a day begging fine-cut.

In Turkey, the Sultan's message is called the Imperial Hatt. The telegraph authorities allow no one but "plugs" to send it.

The body-snatcher, the salary-scalper, and the tramp are abroad; but don't say too much about them. It is easier to look wise than to talk wise.

A Portland, Me., correspondent is loud in clamoring for the recognition of his friend G. Wood as the handsomest man. We are afraid he is on'y gaggin' us.

The buSiness was so brisk getting out this douBle number of THE OPERAVOZATOR that the Editor *pro tem* took a hand at type setting. He was badly salted.

Recommendations for a "first class man": A high sense of honor, a determination never to take a mean advantage of another, and a strict adherence to truth, delicacy, and politeness.

"Have name astern no pot alone fifteen 6 M" is the way Johnny Lawlor on the Grand Trunk R. R received it. But the infuriated customer says it should have been "Have team Eastern Depot, at one fifteen P. M."

THAT HANDSOMEST MAN.—Mr. A. L. Baker, of Chicago, being "sweet as new mown hay," is eligible. Paul Laloup is put forth by New Orleans. Adam Beidler, of Chicago, leads the poll so far; "Viola" electioneering for him.

On account of the success of the electric light and probability of its superceding gas, the Exeter (England) Town Council have broken off negotiations, which had almost reached completion, for the purchase of the gas works in that place.

The telephone fever has broken out in England, where the announcement is made that, "a musical conversation" will soon be carried on in public between London and Brussels, and a duet by two singers two miles apart be added to the attraction.

By connecting the New Mexico and Arizona telegraph systems near Santa Fe, New Mexico, recently, the only continuous southern line across the continent was formed. The next step proposed is to connect the military line of Texas with that of Arizona and New Mexico, by running 250 miles of wire down the Rio Grande from Messilla to Fort Stockton.

Messages have been sent from England to America through one Atlantic cable, and back again to England through another, and there received on the mirror galvanometer, the electric current used being that from a toy battery made out of a lady's silver thimble, a grain of zinc, and a drop of acidulated water.—*Good Words.*

In the suit of the Atlantic and Pacific Telegraph Company against the Alabama and Chattanooga Railroad Company for condemnation of right of way before the Probate Court, the case was, on motion of the defendants, July 18th, removed to the United States Court. This delays further proceedings until the next term of the United States Court, at Huntsville, Ala., in October.

PRIZE ESSAY ON THE TELEGRAPH.—This is a telegraph office. The young man at the table is an operator. The little brass thing ticking away on the table is an instrument. The operator is easily distinguished from the instrument. He cannot talk so fast as the instrument, but he can sleep a great deal more. He is going to sleep now. The man leaning over the counter is a heartless citizen who has the cheek to ask the operator to send a dispatch for him. The operator takes the message, but he does not send it. He has'nt time. He loses nine games of checkers while that citizen is wondering why he does'nt get any reply to his dispatch. Then the citizen starts out to walk to the place and see the man. He finds him, and, soon after they meet, the dispatch comes along. The citizen remembers and recognizes it. He is affected to tears. The operator finds him and charges him forty cents for sending the message, forty-five cents for the wear and tear of the instrument, fifty cents for the strain on nervous system, sixty cents for collecting rate on message, sixty-five cents on general principles. He learns afterward that the citizen has yet some money left, and he is going back in the morning to borrow it of him.

Make me a Message.

Owen Tracey, track foreman on an Indiana railroad, rushes into the telegraph office at a way station and breathlessly exclaims: "Make me a missage!"

The operator seizing a clip with much alacrity, inquires: "Who is the message to?"

Tracey: "To Jimmy Dunn, av coorse."

Operator: "Well, what will you say to Mr. Dunn?"

Tracey: "Tell 'im I think he used dom poor jidgment to come out of the gravel-pit on till the main thrack in the face of that possenger thrain."

Operator, (dropping the clip:) "We are not permitted to send profane language over the wire."

Tracey: "Well sur, lave the dom out and sind the rist."

* * *

Answers to Correspondents.

Electric.—No. The 1866 cable is the *second*, and the one commenced in 1865 is, strange as it may seem to you, the third. The first was laid in July and August, 1858, by the American frigates Susquehanna and Niagara, and the British frigates Leopard and Agamenon. It failed almost immediately. The laying of another cable was commenced in July, 1865, but it broke, after 1,186 miles had been paid out, and the Great Eastern, failing to grapple it, abandoned it. In July, 1866, the Great Eastern succeeded in laying a new cable, thus making the 1866 cable the second one laid. After this she fished up and completed the 1865 cable. The big ship is eighteen years old.

Greensburg, Pa.—The late Jesse Mills and Mr. Kettles, of Boston, sent and received 518 messages in nine hours. Messrs. W. G. Jones, of Philadelphia, De Graw and McCarty, of Washington, Phillips, Boileau, Taltavall, Baldwin, Moreland, Catlin, Bennet, and other New York men have all made time nearer to fifty words per minute than to forty. We believe that Mr. E. C. Boileau, if not actually a faster, is a *faster and better* sender than any operator in this country; but if you knew of any one who has done better, and the case is well authenticated, we shall be glad to make it a matter of record.

* * *

Compliment to a Worthy Telegrapher.

A surprise party, composed of both ladies and gentlemen (telegraphers), numbering probably 25 couple, met, by appointment, at Willoughby, Ohio, June 22, and proceeded at once to the residence of Mr. C. N. Smith, the highly esteemed train dispatcher of Erie Division of the Lake Shore and Michigan Southern Railroad. Mr. Smith was taken entirely by surprise, but a very enjoyable evening was spent. The Geneva Grays' Band was in attendance, and dancing was kept up until one A. M. The Cleveland *Leader* has a long account of the pleasant affair.

PERSONALS.

Eddie Wendell is now operator at East Chatham, N. Y.

Ed. Stevens is operator for the W. U. at Olympia, Washington. Ty.

E. G. Beckwith, of Chatham Village, N. Y., is taking a vacation. Miss Lina C. Wendell represents him meanwhile.

Col. C. K. De Lappe is agent and operator, N. O. and M. R. R., at Bay St. Louis, Miss.

Sergeant Watson, of the U. S. Signal Service, has his office at the Custom House, Cairo, Ills.

H. H. Baird is chief operator at Cairo, Ills. His abilities as a vocalist are very highly praised.

Manager Finks, of the W. U. Waco, (Tex.) office, is the proud father of a new boy, and the papers down there are extolling his prowess.

During the absence of Harry Mack, night operator, B. and A. R. R. Greenbush, N. Y., his place was filled by R. Stevens of Albany.

F. S. Kent, formerly of Chicago, is now manager at Cairo, Illinois. He is a good shot, and recently broke nine glass balls out of ten fired at. Bob Newell, of the Buffalo dock (N. Y.) office had better ook to his laurels.

J. K. Henley is agent for the N. O. and M. R. R and W. U. operator at Mississippi City, Miss., J. J. Davidson fills a like position at Grand Bay, Ala.

During a thunderstorm last week, lightning struck the telegraph office at Locust Point, B. and O. R. R. John McLaughlin, the operator, was thrown six feet from his seat, and was found to be insensible.

Olympia, Washington Ty., has been designated as a U. S. Weather Signal Station. E. F. Kubel has been sent from Washington, D. C., to establish and take charge of it.

From Massachusetts. — Manager Robinson of Pittsfield, Mass., has recovered from his recent attack of typhoid fever. Miss Colsoy of the depot office has returned from her two weeks' vacation looking well. Will Nye is the assistant operator at West Stockbridge, Mass. John A. Manley is the manager at Washington, Mass.

Toronto, Ont.—Miss Hampton fills the vacancy caused by the resignation of Miss Clark (now Mrs. Battin) in the operating department. Mr. E Whiteside has returned from his pleasure tour. Dan Halpin, one of the night boys, has been deservedly promoted to the position of operator. Miss Weir is taking a three months' vacation, leaving Miss Wynne in her place. Mr. Walker, from Manchester, recently visited Toronto office.

MARRIAGES.

Summerlin—Deisher.—June 22d, 1877, at the residence of the bride's parents, Philadelphia, by the Rev. James E. Cooper, Samuel Summerlin, of St. Augustine, Florida, to Miss Kate Deisher, of Philadelphia.

BIRTHS.

July 6th, 1877, to Charles F. Day, of the W. U. Chicago office, a daughter. Nine pounds.

July 17th, 1877, to J. M. Hanlin, operator W. U. Tel. Co. and S. & N. A. Railroad, Blount Springs, Ala., a fine boy. Second edition.

DEATHS.

Ryan.—At Detroit, Mich., June 20th, after a short attack of inflammation of the brain, Eva, youngest daughter of Crosby J. and Elizabeth Ryan, aged four months and nineteen days.

Mr. Ryan has the sympathy of the telegraphic profession in his bereavement.

Walton.—At Philadelphia, July 14th, William Walton, operator at the twenty-fourth district station house, aged thirty-five years.

Maize.—At Philadelphia, July 20th, Anna Bell, infant daughter of I. D. and Josephine C. Maize, aged eight months and fourteen days.

We are called upon to announce the death of our brother operator, Mr. T. A. Smith, of Goodman, who passed over the dark stream on the morning of the 18th inst. Mr. S. will be remembered as one of the veteran telegraphers of the State, having been in the service for twenty five years, and in the employ of this company for nearly twenty years, during which time he proved himself a faithful servant.

Private Line Instrument.

Instrument, Nickel Plated	$8.00
Battery, per Cell	2.00
Outfit, Complete	10.00

Twenty per cent. discount for Cash with the order.

Cut in last number of The Operator. Send for price list, free.

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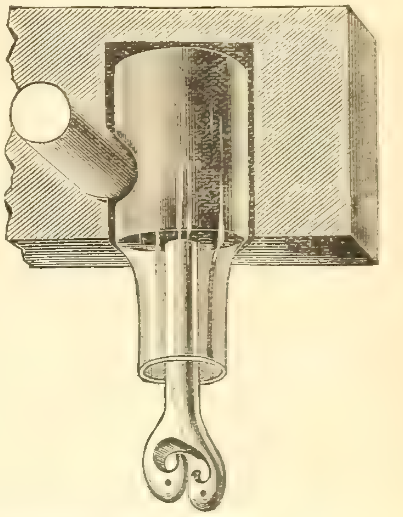

The advantages of this Insulator are:

1st. It exceeds ordinary Insulators *a thousand fold* by actua measurement in its insulating properties.

2d. It has an easy fastening for any size of wire without bending or straining the latter, and cannot be displaced or broken by any strain which the wire will bear.

3d. It costs less than any other Insulator of equal merit.

The glass shell is made of the celebrated La Bastie toughened glass, and in its present shape is as durable as iron.

As the light penetrates freely to the inner chamber of the Insulator, *insects will not harbor in it.* A common cause of defective insulation is thus avoided.

As a cross arm Insulator, this form is not only better than any yet ever devised, but it is cheaper than ordinary glass and pin. Send for circulars.

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STATE WHERE YOU SAW THIS.

HOW IT PAYS To Learn Shorthand:

1. It is interesting as a Game of Chess, [illegible] Any Boy or Girl. 2 It is [illegible] correct use of language. 3 It [illegible] cultivates the memory. 4 It [illegible] success in any of the professions. 5 It [illegible] women to obtain profitable employment. [illegible] cost of time and study than any other profession. [illegible] TELEPHONE, the new [illegible] will soon require many thousands of Phonographic writers as operators, in order that [illegible] instrument.

The American Manual of Phonography [illegible] Self Instruction [illegible] any address on receipt of $1. Manual of Takigraphy, [illegible] rapid, [illegible] Prepaid, on receipt of $1 2

The above are recommended to Telegraphers, many of whom are already appreciating the necessity of learning Shorthand, as two of the best books for that purpose before the public. Whether or not the Telephone will make it necessary for Operators to understand Phonography, every Telegrapher will be the better for having studied it. The time required is not more than a few minutes daily.

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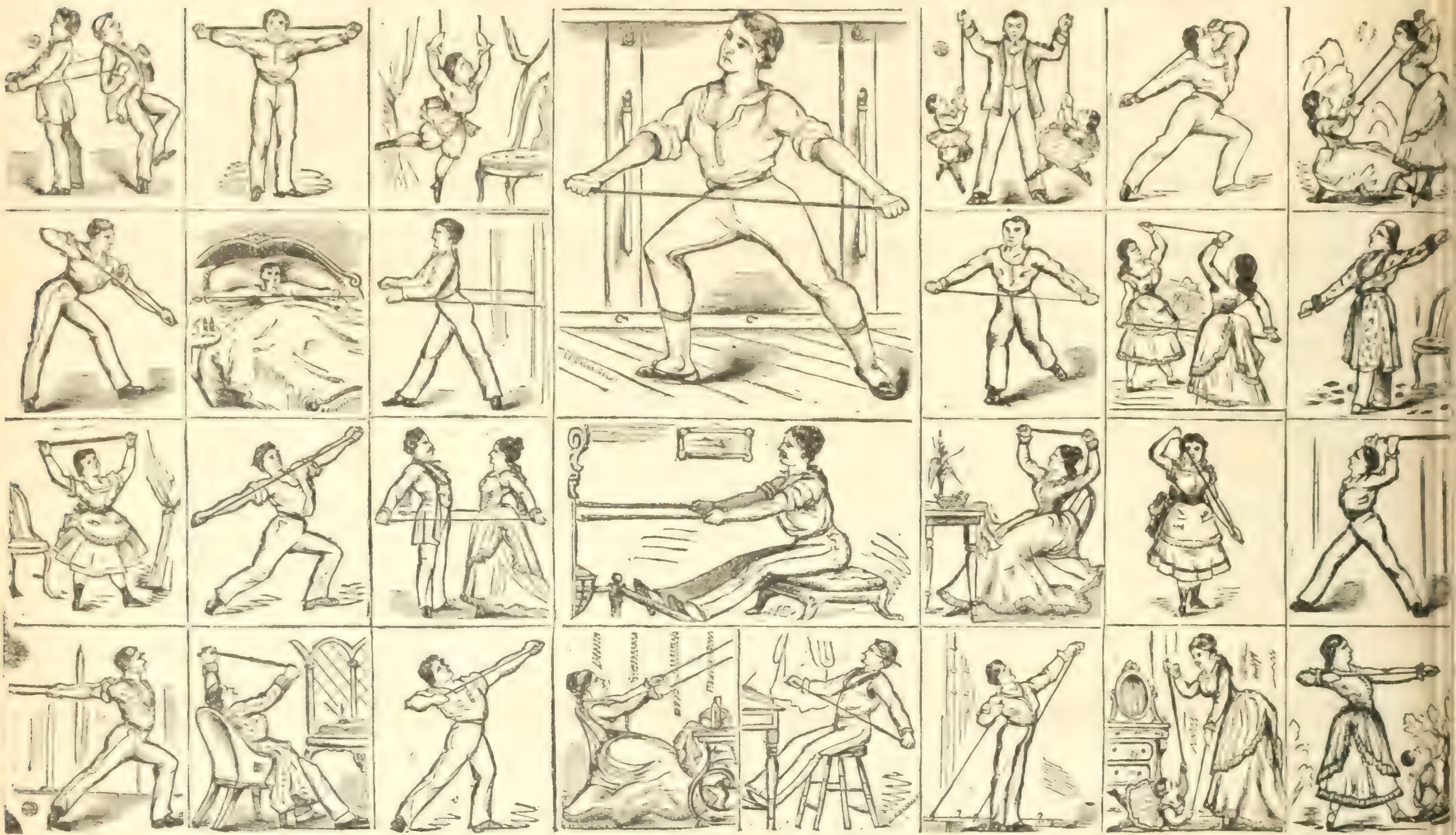
GOODYEAR'S POCKET GYMNASIUM.

The Most Complete System of Physical Exercise ever devised for Home Practice.



This invention is designed to take the place of several of the appliances devoted to physical culture at present in use. It is a vast improvement upon the elastic strap with handles, which has been so largely used for strengthening the arms and expanding the chest. Constructed of various sizes, and arranged not only for arm exercises, but for lifting, rowing, and the like, it combines all the advantages claimed for **THE HEALTH LIFT**, and such as are secured by the ordinary gymnastic exercises. This system of exercise is purely stationary, the contraction of the elastic material securing the double pull which is deemed so advantageous. The accurate gradation of the appliances, and their great range of power, adapts them alike to young and old, to the feeble as well as to the stalwart.

A brief description of the apparatus will satisfy our readers of its simplicity and power of usefulness.

Elastic tubes of various dimensions, from a diameter of five-[illegible] of an inch to [illegible], are constructed of pure India Rubber, and are vulcanized by a process which deprives them of unpleasant odor. Suitable handles are inserted into the ends of these tubes, and are there firmly secured. A safety cord passes through the handles, and coils loosely within each tube to prevent all danger of injury from the flying ends of the tube, [illegible]. These tubes are eight in number and to these other and more powerful ones are added if demanded. The series of eight appears to supply the general want. By the proper use of the entire series, it is safe to say that the strength of any individual can be more than doubled in a very short time.

The manner of using the tubes will readily be understood by an examination of the cuts. For all chest exercises, such as rowing, boxing, putting up dumb-bells, and swinging clubs—in short all employment of the muscles of the chest, arms, and shoulders—they will be found to be superior to all other appliances. A single tube may be employed, with the hands as are the [illegible] ly; but greater [illegible] by the addition of the hooks and screws [illegible] the larger sizes supplied. The most desirable and effective Lifting Machine is secured by employing two of the large tubes provided with eyes. The double pointed hooks are readily screwed into the floor and the Lifting Machine is ready for use. The elasticity of the rubber secures a perfect reaction, and provides for expanded growth of muscular power. The cuts exhibit the appliance in use.

The advantages attending the various forms of physical exercise to which these tubes are especially adapted can hardly be overstated. Every argument which can be appropriately used in favor of the Health Lift is equally appropriate here: and many others may be added—inasmuch as the system admits of an infinite variety of changes, and provides for the free growth and strengthening of the entire muscular fabric of the human frame. In ordinary life many muscles are neglected, while others are, perhaps, unduly exercised. The muscles of the leg of the professional dancer become enormously developed, while those of the arm shrink and shrivel and lose their fair proportions. The right arm of the blacksmith becomes inordinately developed by excessive use, while his lower extremities lose much of their power. The true theory of exercise is to develop all the organs harmoniously, and thereby to secure the highest physical condition. Serious doubts exist as to the advantage to be derived from the more exhausting exercises of the gymnasium; there is, however, but one opinion among medical authorities as to the value of the milder form of ¦physical culture, known as Light Gymnastics; and it is the object of the invention which is here introduced, to supply, in the most compact and useful form, all the apparatus required for the best development of physical power, in both sexes and at all ages.

It is admitted that sound health and symmetrical growth can not be secured and maintained for a prolonged period, without a perfect circulation of the blood. Congestions of brain, or stomach, or liver, or other internal organs, must ultimately follow a life without activity—a life of partial torper. Operators and professional men use the brain excessively, but neglect the body. By and by, brain and body break down. If the blood had been sent actively to every tissue and fibre by physical effort rightly directed, body and brain would not wear out in a century. The right hand of an operator is overworked, while the muscles of other portions of his body, with all their intricate net work of nerves and blood-vessels, are permitted to remain inactive and comparatively unused. The consequence of this unequal exercise is made apparent in many ways. There is [illegible] of the chest and back, a curvature of the spine, a flattening of the thorax, a lessening of the breathing space, a weakening of the heart's action, and a general loss of vital power.

It is neither difficult, nor onerous, nor expensive, to keep the human frame in perfect condition by the means which we here indicate. The emotions attending the use of the tubes are only those of satisfaction and pleasure. Young persons enter into the exercise with the keenest zest, relinquish them with reluctance, and return to them when the appointed hour arrives, with the liveliest expressions of delight. The brain-weary scholar finds ever-renewed exhilaration and mental elevation from their regular daily use. The worn and weary woman acknowledges the sparkle and glow which comes from a few moments' daily practice with these health-giving appliances. Even the bed-ridden invalid or convalescent, unable to walk and without the power to take exercise in any of the ordinary modes, can find something of invigoration by toying with these life-giving tubes; while the active brain of the person whose toil throughout the day has banished sleep at night, is lulled to repose by the equalization of the circulation which a few moments' exercise with these tubes induces.

Here, then, is EXERCISE, and all that the name implies, in most inexpensive and portable form. Here is the best method of accumulating strength and elasticity; of warding off disease; of securing that physical and mental tone which ever accompanies vigorous health.

PRICE LIST.

No. 1—For Children from 4 to 6 years	$1.00
No. 2— " " " 6 to 8 "	1.10
No. 3— " " " 8 to 10 "	1.20
No. 4— " " " 10 to 14 "	1.30
No. 5— " Ladies and Children, 14 years and upward	1.40
No. 6— " Gentlemen of moderate strength	1.50
No. 7— Used by Ladies, Children, or Gents	2.00
No. 8—For Gentlemen of extra strength	2.50

Full set (family use), One each, (1 to 6), Two 7's and Two 8's. $10.

No 7 and 8 are fitted with a screw-eye and hook to attach to the wall or floor. A pair of No. 7, ($4), or 8, ($5), makes a complete Gymnasium. Extra hooks, 5 cents each, or 60 cents a dozen.

Sent to any address, post-paid, on receipt of price.

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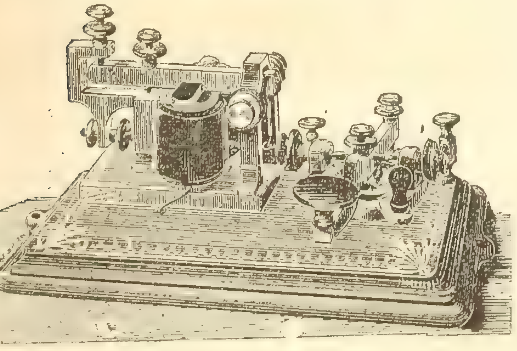

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Instrument alone	4.50
Same Instrument, on Mahogany Base—	
Complete Outfit	4.50
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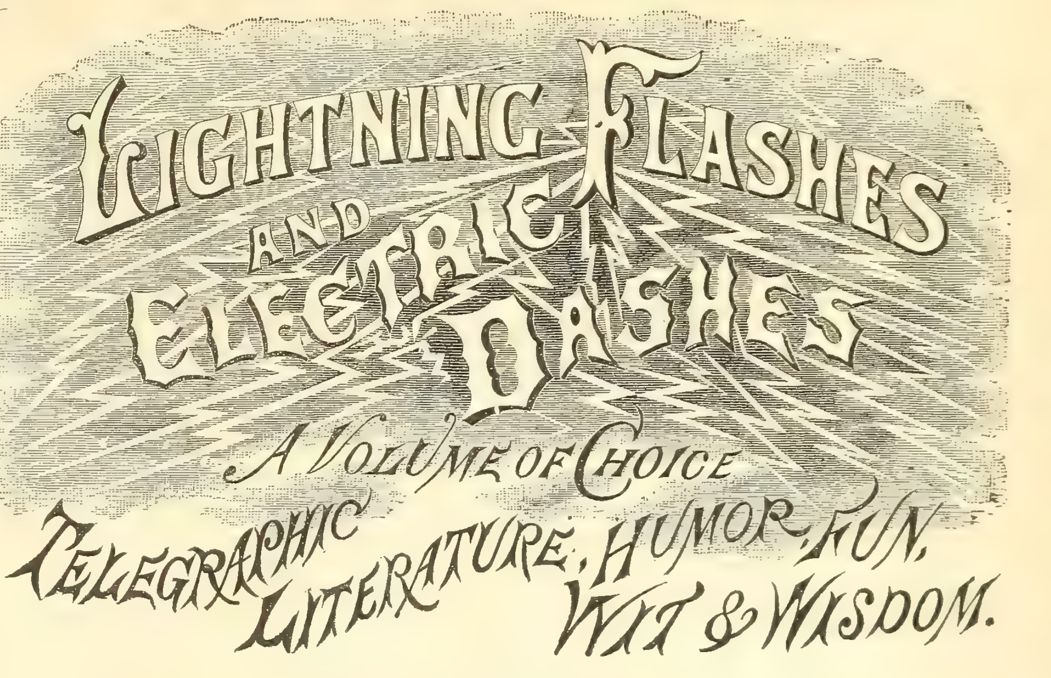

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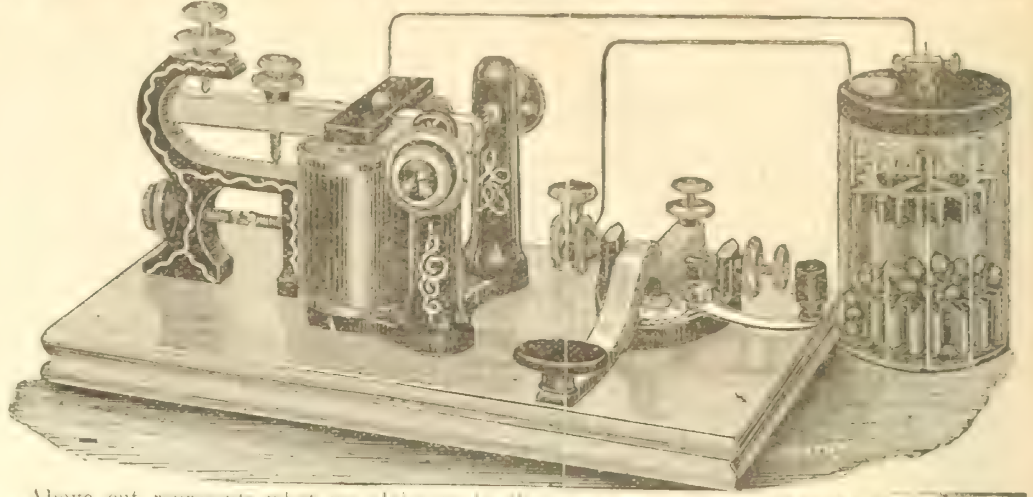

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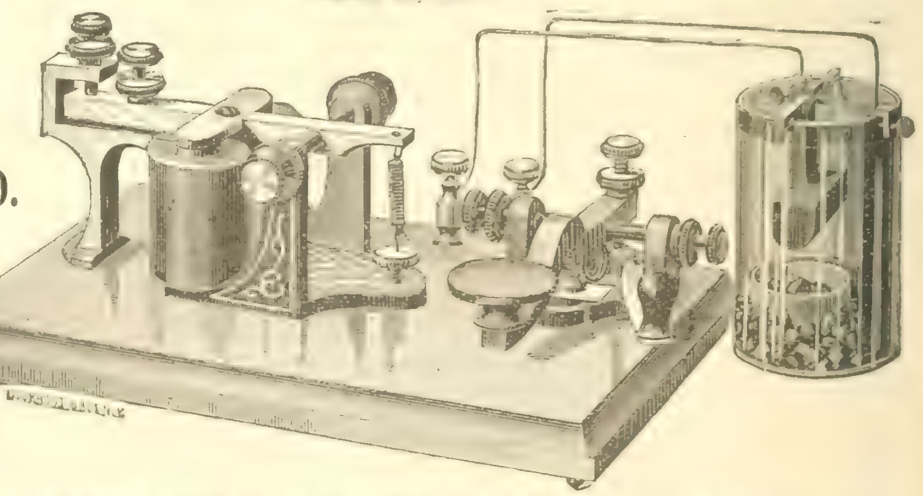

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A JOURNAL OF SCIENTIFIC & PRACTICAL TELEGRAPHY.

Vol. VII. NEW YORK, AUGUST 15, 1877. No. 12

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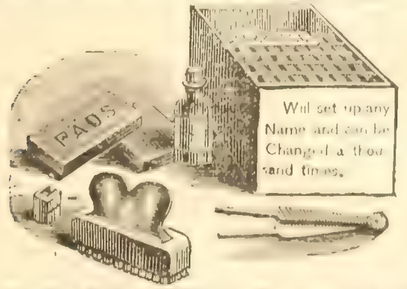
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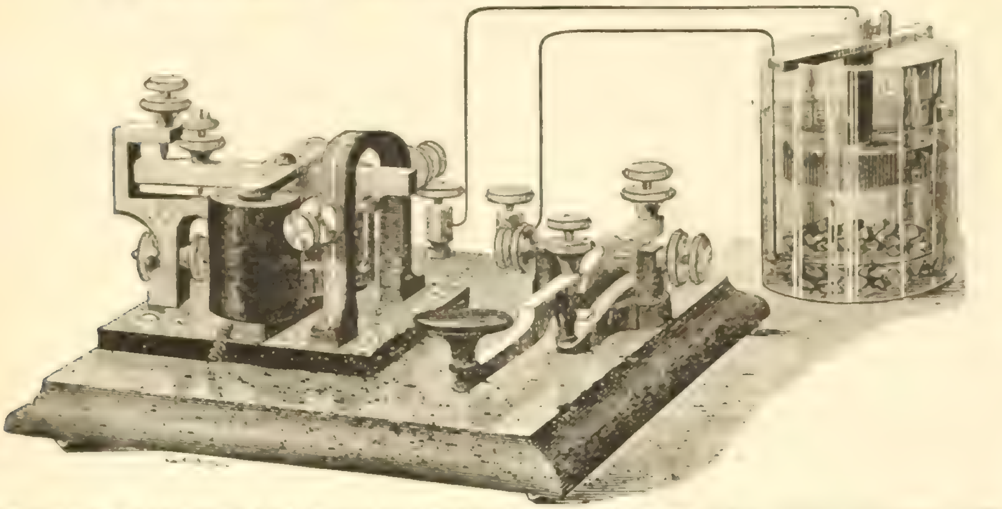

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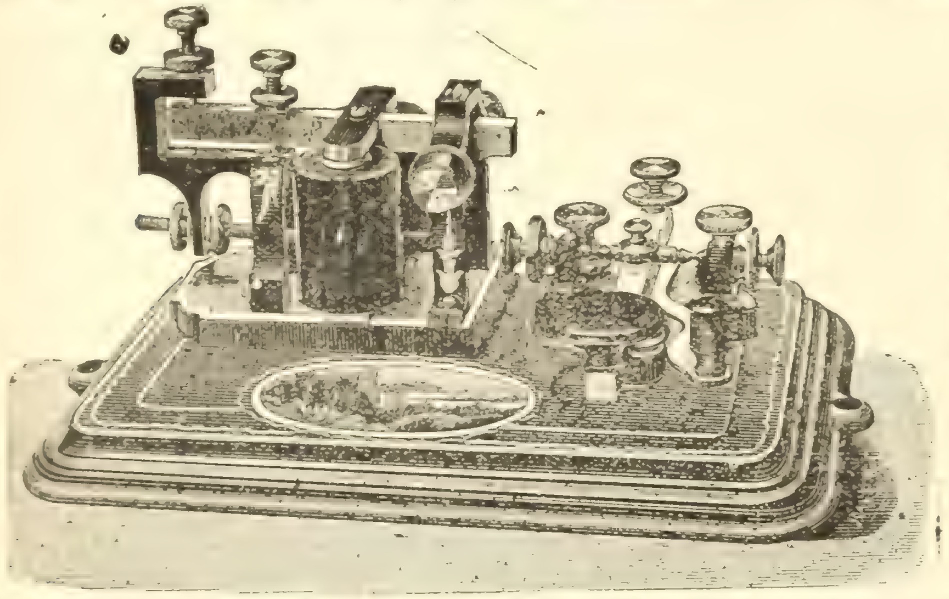

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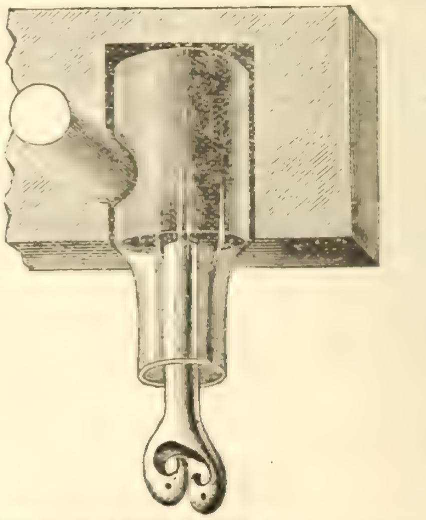

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SCIENTIFIC & PRACTICAL TELEGRAPHY

August 15th, 1877.

Volume VII. **Whole No. 84.**

Birds on the Wires.

Little birds sit on the telegraph wires,
  And chatter and flutter and fold their wings;
Maybe they think that for them and their sires
  Stretched always on purpose those wonderful strings;
And perhaps the thought that the world inspires,
  Planned for the birds among other things.

Little birds sit on the slender lines,
  And the news of the world runs under their feet—
How value rises and then declines,
  How kings with their armies in battle meet;
And all the while, 'mid the soundless signs,
  They chirp their small gossipings,'foolish and sweet.

Little things light on the lines of our lives,
  Hopes and joys and acts of to-day;
And we think that for these the Lord contrives,
  Nor catch what the hidden lightnings say.
Yet from end to end his meaning arrives,
  And his word runs underneath all the way.

Is life only wires and lightning then,
  Apart from that which about it clings?
Are the thoughts and the works and the prayers of men,
  Only sparrows that light on God's telegraph strings,
Holding a moment and gone again?
  Nay! he planned for the birds with the larger things.
—The Methodist.

◆

Sandy Jones.

BY JOHN OAKUM.

I once heard Manager Downer say there was altogether too much noise over in the neighborhood of Sandy Jones's desk. But there was a merry twinkle in the speaker's eye, and my surprise at his assertion was gone scarcely before it came—I divined that he was funning. I have known Jones, off and on, for many years, but I cannot recall that I ever heard him speak except when spoken to. He comes to the office promptly at eight A. M., and performs all the work required of him in a cheerful manner. He never puts on a substitute, and the word "absent" has never been written opposite his name in the office diary. He never works extra, and winter and summer he comes and goes quietly and almost noiselessly. It was Fanny Fern, I believe, who wrote so pleasantly of the quiet Mr. Smith, whom nothing could disturb, and the explosion of a bunch of fire crackers under whose chair caused not an additional journey of his eyelids across his sad, grave eyes. Sandy Jones is a comely counterpart of the peaceful Mr. Smith, and sometimes when I have seen the messages melting away at the rate of from sixty to seventy per hour, I have wondered how so deliberate a man could ever attain to such a degree of speed in telegraphy. As Mr. Clemens says of himself: I have seen slower people—more deliberate people—more quiet and unobtrusive people. But they were dead

I visited the Western Union office the day after the fire, to view the charred remains of the dismantled switch, and on my way out I passed by Jones's table. He was receiving, and his hand was crawling over the blanks at a snail's pace. But the little metal based sounder was pattering away at a fearful rate, and the quiet Mr. Jones, in the five minutes which I watched him, put six messages up in the clip, and seemed in no way hurried. Can any one tell me how these slow operators make such time? "When I was in Pittsburg," remarked a new acquisition to the night force, not long since, "I used to attend the repeater on the St Louis wire. That was when we worked it single. Jones was working the New York end, and he never broke nor said a word about my repeater being out of adjustment, as the other men did. He seemed to be on hand for business, and the manner in which he took it in was immense. When St. Louis got clear Jonesy would begin to send at a gait that would make your flesh creep, it sounded so slow. But, by hookey," concluded the narrator, enthusiastically, "he would send two messages to the other fellow's one. I've timed him again and again, and found him averaging a message in three-quarters of a minute by the hour at a time. He didn't make any noise, but he never halted nor blundered, and his letters were packed so close together that if you had held one of his words up to the sun you could'nt see daylight between the letters."

"'Never halted nor blundered'" said a visiting operator from Memphis, who was present, "well, you can just bet he never halted nor blundered in his life. Why, he is like the little savage in Stoddard's 'South Sea Idyls,'—he is a brick, baked in God's own beautiful sunshine. I was brought up down in Maine where he came from—his father and mine were neighboring farmers. I knew him later in the army," continued the speaker, "and was with him at Newberne. There were four of us rooming together in the upper story of a warehouse, and one night three of the four went out skylarking, and managed, as a matter of course, to get into a row. There were eight of the other party against us three, and after a little scrimmage we precipitately withdrew from the encounter, and took a short cut over the fences for our rendezvous. Reaching our quarters we found Sandy still up and awaiting our return. He was very peculiar that way—rather old fashioned in his notions about courtesy toward those about him, and he generally sat up and read until the last of his unruly mates were safely tucked away between the blankets. We told him our version of the encounter, and he said he was sorry, and advised us to be more careful in future. Then we all turned in, the late arrivals all feeling that we had rather lowered ourselves in Jones's good opinion, and fearing he felt that we had been indiscreet. About midnight we were suddenly awakened by the tramp of many feet in the hall without, which was followed by a lively assault on our door, and cries of: 'We've found you, you skulking mudsills, and we will have your blood. Open the door; open the door!' The three who were chiefly interested sprang out of bed, and getting into our clothes we prepared to crawl out on the roof through the windows. As we hastily arranged to decamp, Jones, with perfect nonchalance, not only donned pantaloons and shirt, but even put on his collar and cravat. All this time the thundering against the door continued, accompanied by threats and curses. But the oaken door, on which Jones had recently put an old bank vault lock, with a view to keeping the negroes from entering when we were at business, did not give way. As we hastily gathered our traps, and waited impatiently for Jones to collect his and follow us out on the adjoining building, from which we hoped to escape in the friendly dark, the noise subsided, and a voice said: 'We will give you just one minute to open that door in.' Old Sandy, without rising from the shoe over which he was bending, returned: 'It shall be opened before the minute is up. I have only to tie my shoes.' Then a deadly silence followed, in which we could hear our hearts beat. The shoes being laced, Jones walked deliberately to his bed, and to our astonishment drew out a navy revolver from beneath the pillow. We had never suspected such a thorough peace man of owning a deadly weapon, and could not have been more surprised if he had produced a mountain howitzer. Proceeding to the door, he said, serenely: 'Sorry to keep you waiting, gentlemen,' and as he leisurely drew back the hammer of his revolver, he continued: 'I will now turn the key, and you who like may enter.' The sharp click of the revolver as the hammer went back, and the succeeding thud of the three bolts as the key was turned, accompanied by Jones's little speech, had a marvellous effect. We heard nothing, but something in the atmosphere told us that the exodus had taken place. Jones waited a moment, smiled, opened the door, and peering out into the deserted hall, said: 'They won't accept our hospitality, boys. I may as well shut up the shop again,' and he did so. Whither our assailants went we knew not, but it is certain that they retired like so many shadows and never returned. One by one we had crawled back into the room and we would have fallen on Jones's neck, kissed the hem of his garment, or done any other absurd thing, only he did not encourage any such familiarity. Even our thanks were listened to with a bad grace, and he finally interrupted my declaration that he had proven himself a brave man, with 'Pshaw, boys, that is all right, only don't get into any more such scrapes if you can help it.' And when Fred Jennison attempted to get in a word, Jones, who was bending over his trunk, said, quietly: 'That will do, Fred. Let me read you a pretty little thing from Charles Lamb, called 'A Superannuated Man'—for maybe those fellows will come back, and we had better sit up awhile.' And he sat down and read, as calmly as if nothing had happened, that beautiful sketch by his favorite author."

I don't believe any one in New York ever concerned himself about where Sandy Jones resides. He comes and goes with a regularity only equalled by the sun, and no one seems ever to have thought of his having a home. I might have learned where he lived by consulting the office directory, but such a thing never occurred to me. However, I have discovered his abiding place, though quite accidentally. A friend of mine, a dentist, invited me to be present, not long ago, at a re-union of his profession at Paterson, and in the evening we dined with an old acquaintance now residing there, and engaged in the manufacture of silk. As we sat smoking our post prandial cigars on the back piazza, I was struck by the familiar appearance of a man in the next yard. On closer scrutiny I saw that it was Jones, and I was told that the adjoining house and grounds were his property. He was sitting in a camp chair, under an apple tree, and had an evening paper spread across his knees. But he was not reading, and as he gazed westward where the sun was smiling a good night benediction toward the blushing heavens, a look crept into his face such as you, his co-laborers, never saw there. It was a half wistful, half happy expression, and I fancied that perhaps he heard the tinkle of cow bells, the hum of bees, or the chirrup of crickets, and was roaming again, amid the woods and meadows of his native Maine.

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Letters from Europe.

Although Glasgow is the commercial metropolis of Scotland, and in population, wealth and manufacturing importance the third city of the United Kingdom, it does not figure largely in Scottish history. It was the scene, however, of a long-contested battle between the English under Edward, and the Scots led by Wallace, in which the latter fought with great bravery and finally achieved the victory, notwithstanding the English superiority of numbers.

There is a very fine Cathedral in Glasgow, which has lately been handsomely renovated and repaired, and is well worth a visit. It was here that Rob Roy met Francis Osbaldistone, as described by Sir Walter Scott in "Rob Roy." Back of the Cathedral and across the Bridge of Sighs, is the Necropolis, from the heights of which an excellent bird's-eye view of Glasgow may be obtained. Many distinguished persons are buried here, among the rest John Knox.

The Union Railway Company has converted the Old University, founded [illegible], into a central goods depot. The poet Campbell was born in Glasgow, one year and a few days (23) after the American Declaration of Independence, and resided while a student in a corner house nearly opposite the University. You remember his "Hohenlinden," "Exile of Erin," etc. Sir John Moore was also born here.*

* Not a drum was heard, not a funeral note.

Further down High Street, passing the Cross on the right, and the Gallowgate on the left, we came to the Saltmarket, once the residence of the elite of Glasgow, but now the toughest spot in the City, and the abode of wickedness and poverty. Cromwell lodged in the Bridgegate, not far from here. It was a fashionable place then, but that is all changed now.

Glasgow Green, further on, is preeminently the people's park, in the centre of which stands a monument to Lord Nelson. It is a popular evening resort for tired Glaswegians. A splendid outdoor gymnasium has been erected here, on which the rising generation can freely indulge in muscular exercise. Music is occasionally given on the Green in the evening, by one of the many military bands in the city.

Queen's Park is much more fashionable. The flowers are numerous, and exceedingly picturesquely arranged, and the walks [illegible] and neatly kept. From the flag staff mound I enjoyed an excellent view of the city and environs. The battle of Langside was fought in the valley, a [illegible] to the east.

The West End Park contains a very large and costly fountain, little inferior to the one in the New York Central Park. Several cannon which "belched forth their thunder" at the siege of Sebastopol, may also be seen. In the museum here I saw many very interesting things, including the model and cylinder of the "Comet," the first vessel propelled by steam that regularly traded in Europe. She was constructed in 1812, for Henry Bell by John Robertson, the size being 40x10½ feet—four horse power. I also saw, amongst other things, a section of a first class battle ship, copy of the first paper published in Japan, weapons and products of Central Africa, collected by Dr. Livingstone during his travels; the warrant to execute Mary Queen of Scots, 1587, and King Charles I. 1648, original letters of Admiral Lord Nelson and Field Marshal, the Duke of Wellington, ancient rare and valuable coins, etc.

In George Square, in the central part of the city, are very handsome monuments to Sir Walter Scott, Sir John Moore, Sir Robert Peel, Lord Clyde, James Watt and equestrian statues to the Queen and Prince Albert. I visited the head Postal Telegraph office on the southern side of the square, and was courteously received. The old office at present is being pulled down, a little at a time, and a new and very fine one being built on the same site. The Prince of Wales laid the corner stone with much pomp and splendor last September, and during his two days visit was the guest of the city. The bill of expenses was sent to the City Council while I was in Glasgow, and amounted to the extremely modest sum of $45,000. Another advantage of having the telegraphs in the hands of the Government. Just imagine that Uncle Sam prides himself upon the possession of the telegraph system of America, and that the corner stone of a new office was to be laid at—well, say Hoboken, how the good people of those foreign shores would growl about paying $45,000 to entertain Prince Webb Hayes on the occasion.

The Glasgow office employs two hundred operators—sixty of them being of the gentler sex—and handles from 35,000 to 37,000 commercial messages a week. The press business averages about 700 messages a day, containing about 20,000 words each. Two of the newspapers have each two special wires to London from six P. M. to six A. M. and another paper has one. The annual cost is about £500 a wire. There are as many as 300 private wires between offices, warehouses, etc. in Glasgow, also leased from the Government at so much a mile, which includes maintenance, etc. One hundred wires enter the main office, and there are 96 instruments, namely: 1 Bain, 4 automatics, 24 duplex, 18 bells, 16 A B. C., 3 single needles, and 30 Morse. There are 5 wires to London, 2 to Liverpool, 2 to Manchester, 2 cables to Dublin, 1 to Belfast, and 1 to Londonderry. The speed to London on the Wheatstone is frequently 130 words a minute. Punching is done by the aid of compressed air, at the rate of about forty. Business is worked off in very good shape in the Glasgow office. On an average day 75 per cent. of the business was sent under 5 minutes, and 20 per cent. of the remainder under 10. There are 160 messengers in this office—35 of them acting office boys. The Superintendent's salary is £280 per annum; his assistants, £150—£130; first class operators, £170; 2d. class, 44 shillings a week, 3d., 35.—4th, 27. Ladies, 1st class, 30s., 2d., 27s., 3d., 21s. The office in the Stock Exchange also does a large business, and has direct wires to the London Stock Exchange and other points.

Of course I visited Loch Lomond, ("the lake full of islands,") the Queen of Scottish lakes. The train goes to a little place called Balloch, whence a little steamer conveys tourists to the head of the loch. Loch Lomond is about twenty-three miles long, and its breadth where greatest, about five. There are over thirty islands upon it, ten of them of considerable size. The scenery at several places is strikingly beautiful, especially in the vicinity of Inverenard, celebrated by Sir Walter Scott in "Rob Roy," as the MacGregor Country. Rob Roy's Cave is here, where the "bold outlaw" was wont to hide, and where Robert the Bruce also found shelter after the battle of [illegible]. Farther up is the "Pulpit Stone," from which the parish minister is said to have frequently addressed his scattered flock in this wild district. Presently we came to the base of Ben Lomond, from whose summit, being 3,200 feet high, an excellent view may be obtained of Lanark, Stirling, Renfrew, Ayr, and the castles of Stirling and Edinburgh.

Among the passengers on the lake steamer were the Dumbartonshire Rifle Volunteers. They had a very fine band of a dozen pieces, which struck up "[illegible]" as soon as the steamer started, and continued to play at intervals all the way up, greatly adding to the other passengers' enjoyment. The Volunteers went ashore at Luss, a lovely spot half way up the lake, much frequented by anglers, and drilled until the steamer's return. As we neared Luss coming down, it was quite delightful to hear the sweet strains of "Auld Lang Syne" wafted to us on the evening breeze from that peaceful, retired spot amid the wild, romantic mountains of the Scottish Highlands. In a few minutes we could see the entire company drawn up in double file on the dock, the band still playing and the men vigorously singing. The steamer being alongside, they all marched aboard with military tread to the tune of "The Campbells are Coming," which, however, soon changed as the steamer swung away from the dock, amid enthusiastic waving of handkerchiefs from a crowd on shore, to "The Girl I Left Behind Me," and other appropriate airs. Then the steamer pushed on into the gathering darkness, and we feasted our eyes upon the grand, romantic scenery that surrounded us. Loch Lomond exceeds all the other Scottish lakes both in size, variety, and splendor, and unites in itself every style of scenery which is found in the other lakes of the Highlands. At Balloch a special train in waiting conveyed us back to Glasgow, where we arrived at 11:30 P. M. The band until it reached its destination was very liberal with music. After it left us, all the passengers in the car I was in joined in singing Scottish songs, "Ye Banks and Braes o' Bonnie Doon," "Should Auld Acquaintance be Forgot," etc., which made the trip to Glasgow as enjoyable as it otherwise would have been tedious and monotonous.

But, outside of Edinburgh, I think that the most enjoyable trip I had was from Glasgow to Ayr, "the land of Burns." Starting from the Broomielaw wharf at 7 A. M. in a fast and excellently appointed little excursion steamer called the Bonnie Doon, we had a delightful trip down the Clyde, passing a remarkably fine fleet of vessels, which ply to almost every part of the world, including several large United States and Canadian steamers. The Doon passes quite close to Dumbarton Castle, which is built on a wild rock 560 feet high and a mile in circumference, at the junction of the Leven and the Clyde. This castle knew many masters in the many vicissitudes of Scottish history. In 1571 it was the only place of strength held by the unfortunate Mary, Queen of Scots. A common soldier whose wife had, probably not unjustly, been accused of theft and punished by order of the governor, out of revenge deserted to the enemy, and offered to lead a party up the rugged cliffs and make them master of the fortress. Captain Crauford and a small but determined band followed him. Going up the ladders placed against the face of the rock—which, if you only saw, I should not need to remark was an extremely bold and dangerous undertaking—one of the soldiers was seized with a sudden fit. His companions could not pass him, and to tumble him down the rock, besides being cruel, might cause a discovery. But the captain was equal to the emergency. He at once ordered him to be tied fast to the ladder, that he might not fall when the fit was over, and turning that side toward the rock, the rest mounted on the other without difficulty, finally reached the top undiscovered by the sentinels, surprised the garrison, and captured the stronghold. Sir William Wallace was confined here for a time, and his great two-handed sword is still to be seen.

From Dumbarton on down past Greenock the scenery along the Clyde is perfectly magnificent. Burns' "Highland Mary" is buried in Greenock. After leaving the Clyde we presently reach Ardrosson, the scene of some of Wallace's daring exploits, and Troon, a favorite watering place. Six or seven miles farther on is Ayr. I visited the cottage under the roof of which Burns was born, January 25th, 1759, and spent his infancy. It is a primitive "clay bigging," about two miles from Ayr, and is now used as a wayside tavern. Close by is the roofless ruin of Alloway Kirk, immortalized by Burns as the scene of that wonderful encounter between Tam o' Shanter and the witches, and where Burns' father is buried. I saw the window in the east, "where sat Auld Nick in shape o' beast," as well as "the auld brig o' Doon," a short distance beyond, and even climbed the key-stone where that distressing accident occurred to Maggie, in which

> "Ae spring brought off her master hale,
> But left behind her ain gray tail."

I also meandered along "the bonnie winding banks where Doon rins wimplin' clear," and paid my respects to Burns' monument, a handsome erection sixty feet high, situated between the old and new bridges over the Doon. Poor Burns! He was a genius. There's something very touching in the story of his love for "Highland Mary"—Mary Campbell. You remember they were to have been married on her return from a visit to some friends in the West Highlands, but, soon after reaching Greenock, Mary was seized with a malignant fever, and died before Burns could arrive to bid her a last farewell. Burns died at Dumfries, July 21st, 1796, aged 37½ years. He is buried there, and a monument has been erected to his memory.

I expect to start to-morrow for Fleetwood, Derby, Birmingham, London, Brighton, etc., in England, and Dieppe, Paris, Versailles, etc., on the Continent. In my subsequent letters I shall try and tell you something about these famous and fashionable places and what I may see in them. The weather is still damp and disagreeable, but my health is good, and I continue to enjoy myself.

W. J. J.

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"Genius is Prolonged Patience."

Mr. Editor, the truth of the above remark is not only exemplified in the admirable little story of "Barney Martin," which recently appeared in THE OPERATOR, but is also clearly demonstrated by almost daily occurrences. "Patience and perseverance," we are told, "can accomplish all things." If there be anything like genius within us, it must sooner or later reveal itself. No matter how great may be the difficulties, nor how formidable the obstructions that present themselves in our path, all must go down and succumb to our patient and determined perseverance. Mountains may frown, the ocean may threaten, and adverse circumstances may thwart all our designs, but the end has ever been the same, the patient and the preserving must and will surmount all these, and the result will present them a bright and smooth path to that goal which has always been their aim. It is only *true* genius that has manifested itself under trying circumstances, and has appeared in all its splendor after having successfully combated difficulties that might have at one time been considered unsurmountable. The writer of "Barney Martin," has given us an illustration from the Parliamentary history of Great Britain—the case of Mr. Disraeli, who, without friends, connection, or influence, rose from comparative obscurity to the highest position anyone could attain, that of Chief of the Government of Great Britain and its Dependencies, the ruler *de facto* of more than two hundred millions of people, the man whose *fiat* extends over a great and ancient monarchy, possessing territories that occupy every quarter of the globe, and whose extent is such that the sun never sets upon them. Such a man must have possessed genius of a high quality. Every man cannot attain genius qualifying him for a great statesman, but there are thousands of other positions in life wherein genius will develop itself if only pursued with patient perseverance. One or two examples of this kind of prolonged patience in the development of genius may not be out of place in serving to illustrate this subject more fully—one is the case of Mr. William Pitt, who, like Disraeli, entered Parliament when a very young man (he was in his 23d year). The then Prime Minister was the famous Sir Robert Walpole, who, although being himself a man of brilliant genius, stood unequalled as a daring unprincipled corruptionist and peculator of the national finances. History holds him up to us as the *only* Prime Minister who has been impeached for appropriating the national revenue to enrich himself and bribe his followers. He held office many years by thus subsidizing the representatives of the people, so that he could command a majority in Parliament, and by that means do in the national matters whatever he liked, as well as prolong his authority by holding office. Mr. Pitt was too much of a patriot to accept his bribes or do his bidding, but at once applied himself to denouncing the corruption and venality of the minister. This course subjected him as a victim marked out for ministerial castigation, and he soon felt the lash of the tongue of the great "Walpole." His "ignorance," his "presumption," his "inexperience in the science of Political Economy," but, above all, his being "a young man," was particularly alluded to and caricatured to the infinite delight and amusement of the "House." And how did this "presumptious young man" meet those attacks that were intended to disgust his aspiration in seeking to become a statesman, and reform the evil system of government enacted by Walpole and his satellites? In his reply he said. "Mr. Speaker, I am charged with the *atrocious* crime of being a young man—I plead guilty—a few years will effect a remedy." Yes, in a few years this "young man," (Mr. Pitt) had impeached the "Minister"—had hurled him from his lofty eminence where for years he had sat impregnable, and through bribery and corruption had boldly defied justice; and this "young man" was by the national voice called to the position which had been so unworthily filled by the fallen Minister, (Walpole.) Like Disraeli, Mr. Pitt was in after life called to the Upper House (House of Peers) under the title of Earl of Chatham; and it is to him that every American cirizen owes a debt of gratitude for the noble part he took in Parliament in the defence of American Independence. When an old man (years after he had retired from public life), being 71 years old, and lying on his death-bed, he (Lord Chatham) had himself carried on a litter to the "House of Peers," where he made one of the most vigorous and eloquent appeals in favor of independence that was ever heard. Telling the then government (Lord North's) to give the Americans independence, that it *must* ultimately come to that and, that all the government could do to prevent it would be to harass, and inflict suffering and misery on a people they could never subjugate. This was in 1778, two years after the Declaration of Independence, and had the advice of Lord Chatham been taken, five years of war and bloodshed would have been avoided, After the speech he was conveyed to his home, where he died within a few hours. This last exertion, made in the cause of liberty, no doubt, hastened his death, but the veteran statesman left behind him a name imperishable (we might almost consider him a martyr) to liberty and independence; while his genius is conspicuously displayed in the long patience which he had shown through all the antagonistic surroundings of his early life.

Another incident of this kind that I will call attention to, is that of Edward Thurlow, an eminent lawyer in England, who died in 1806. By his ability and genius after many years of hard trial, in which none but the patient and persevering can succeed, he rose to be Lord Chancellor of England, an office with which is always associated that of President or Speaker of the House of Peers, the highest tribunal or assemblage in England, equivalent to our Senate. In one of his addresses in the "House," when some bill was introduced, Thurlow, as usual took the popular side, and for this was taken to task by the then Duke of Richmond, who, in the course of his remarks, alluded to Thurlow as a *parvenu* (upstart) peer. It was here that the genius of Thurlow, so long and so patiently acquired, came to his aid in the scathing retort he made the Duke, who held his position by "hereditary descent," being the eldest representative of the fourth generation from the *first* Duke (his great-grandfather) who was elevated to the "nobility," solely to the fact of his being a "natural son" of King Charles the Second. The King's illegitimate children could not claim to be princes of the "blood royal," hence the next best thing to be done was to confer on them "titles of nobility," and first-class titles even at that—dukes, no less. This Duke of Richmond—this "hereditary nobleman," this grandson of the grandson of a king writhed under the cutting reply of a man of genius whom he had publicly insulted in the senate assembly. "Parvenu peer forsooth," said Thurlow, "it is true, I am from the people; I belong to the people and I owe my elevation to the people and as such I *prefer* the position I occupy, rather than owe my elevation to *an accident of an accident*. I consider my present position as good as that of the *proudest* peer that I now *look down upon*." And as he uttered the last words, calmly and proudly sitting on the "Woolsack,"* he turned his eyes down upon the Duke, who, of course, did not or could not reply.

These, Mr. Editor, are only instances of the development of genius manifested by prolonged patience, and yet such instances are so general, and so numerous, that examples might be quoted from every nation and every clime from the earliest times. Men of genius, statesmen, military and naval commanders, teachers of the arts and sciences, and mechanical constructions, and the thousand and one positions in which genius can display itself, have appeared like an eclectric flash and illuminated all around them by the brightness of their ideas and actions but far the greater number have only achieved eminence after long and patient labor and trials, thus proving that man knows not himself, nor what he is capable of doing until he is thoroughly tried; and that difficulties are often the means of spurring him forward to the accomplishment of deeds, which if only patiently persevered in, will in the end produce what may not only be as surprising to himself as to others, thus crowning all his hopes, by a long and oftentimes a laborious patience.

Yours truly, JUSTUS.

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* The "Woolsack," has been for centuries, the technical name for the elevated seat of the Speaker of the House of Peers.

The Professor's First Sail.

Harry Murdock and myself were students at the Academy of Professor Primrose, in the village of Cowthorp. Cowthorp was synonymous with dullness. A stranger might have entered the town upon a summer afternoon without detecting any signs of life other than the never-ceasing twitter of birds among the holly and sycamore trees, or the hum of countless bees as they flitted from flower to flower in the little patches of garden which surrounded each rustic cottage; not even the barking of dogs, a sound so familiar in all country villages, would have greeted him. It was, perhaps, the last place in the world where one might have expected to find an institute of learning for young men. Yet, here it was that Professor Primrose had located his school, probably for the reason that it was removed from all the wickedness of great cities. The Professor duly stated this fact in his advertisements, and also that Cowthorp was situated on the banks of a beautiful bay, where the salt air could be inhaled by the pupils with perfect freedom. As a consequence a goodly number of unruly boys were placed under his charge, that they might be free from all contaminating influences.

Murdock and I had purchased the Swan, as staunch a little yacht as ever rode at anchor in Cowthorp bay, and as the Professor could not object to so harmless a recreation as boating, we indulged in it to our hearts' content.

The Professor was a very tall, sleek-looking man, with a hook nose, dark gray eyes, stubby beard, but withal a benevolent cast of countenance. He invariably wore very tight pantaloons and a long black frock-coat. The top of his head was painfully bald, but with much care and anxiety he had trained a few locks to grow over the top from the side, which reminded one of stray shoots of ivy creeping over a bare wall.

One afternoon, in the middle of August, the Professor stumbled upon Murdock and myself as we lay amid the fragrant grasses of the orchard moralizing upon the uselessness of a classical education, the intricacies of Virgil, and the callousness of the Professor to all the finer instincts and feelings of human nature. Whether the Professor overheard our remarks or not we never knew, but we were suddenly startled to hear the following salutation from that personage himself:

"How do you do, gentlemen? Exceedingly fine day. Pursuing your botanical studes, I presume!"

Harry answered promptly, "Yes, sir; just finished analyzing several descriptions of grasses, and are about to take a cruise down the bay. Will you honor us with your company? Promise to bring you back safely, sir."

The Professor replied that he should be delighted to do so; that he had been suffering greatly from dyspepsia, and thought a trip across the bay would be beneficial.

We at once started for the beach, the Professor meanwhile becoming quite sociable, even to the extent of regaling us with a yarn or two.

Murdock and I agreed, in a whisper, that this would be a good opportunity to take the Professor outside the bar and give him a chance to dispose of his superfluous bile.

As we raised the sails and hoisted the anchor a "stiff breeze" sprung up, and the Swan bounced off with her "nose well down."

The Professor indulged in a witticism occasionally, and was profuse in expressions of admiration of the scene. It was patent that the Professor had never been on the bosom of the "briny deep" before, and we were secretly exulting over the figure he would cut presently. It now became necessary to "tack," and as the "boom" swung around it caught the Professor's "tile," carrying it overboard. We made strenuous efforts to recover this valuable appendage of the Professor's, but without avail. When we made the next "tack" the Professor was requested to shift the "sand bags," which he proceeded to do very "gingerly," when Murdock, who was before the mast, sang out loudly, "For God's sake be quick, or over she goes." The Professor at once became very energetic, and made the "sand bags" fly as though they were shot from a mitrailleuse. The Swan was now going at the rate of 13 knots an hour, and heavy black clouds were gathering on our starboard quarter, betokening a coming storm. We therefore deemed it best to "go about," and as the Professor went to the leeward side for his ballast a huge wave swept over the deck, completely engulfing him. He emerged with a great gulp, and then gracefully leaned over the side to "cast up accounts." This was too much for Harry, and in spite of the peril which surrounded us he gave three hearty cheers.

Having no ice bags to apply to the spine of the venerable Professor, and only a little brandy stowed away secretly in one of the lockers for private use, we could do nothing for his relief, and were forced to leave him to the sad contemplation of the restless, heaving sea.

The Swan sped onward, and we soon sighted Cowthorp. The clouds had formed into one dark, dense mass, and served as the background for one of Nature's unrivalled pictures. The sun shone refulgently in the West, his rays being reflected with intense brilliancy by the waves, seeming to light up Cowthorp with living fire. All we heard from the dripping Professor was, "Is this our mother Earth, or have we passed into Paradise?" STANLEY.

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Westward the Star of Empire Wends its Way—A-foot.

The following extract, from a private letter, lets a good deal of light upon the method of locomotion between New York and Chicago, and at the same time proves that te-leg-graphers can truthfully say "No pent-up Utica contracts our powers:"

CHICAGO, ——.

MY DEAR ——,

I got here to-morrow night will be three weeks ago which was Monday night. I don't know as the boys here do much except when Maynard looks at them and coughs. He coughs quite frequently. I don't want your boys to know how much I am getting for they would then request me to square up, which I am averse to doing. We have a lunch counter here, but you can't beat the keeper as we put in due bills for what we get. I tell you I saw a rough time coming out here. I left Philadelphia on the roof of a Pullman car and reached Pittsburg next morning. Came near being put off west of that tunnel between Altoona and Pittsburgh, but barely escaped by laying low. Got a pass, by hard scheming, from Pittsburg to Lima, Ohio, and arrived there on my second morning out. Meant to jump a train there but came too late and set out without a penny, to walk to Deshler, forty miles. Walked fifteen miles and then agreed to chop wood for my breakfast. Raining hard. Chopped in my shirt sleeves for half an hour when breakfast bell rang and I scooped it in—first meal in two days. After breakfast I dug out, leaving the old man to chop his own wood. Got to Holgate next morning and laid round there 13 hours for the night express. Jumped the roof of a sleeper at Holgate, but was dragged off by a brakeman [illegible] west. Reached Defiance a-foot the next day—the [illegible] of my journey. Got a freight train at Defiance, and laid in close among some soft lumber, [illegible] asleep and waked up next morning [illegible] standing in a coal yard in a country town. Walked four miles to strike the main road [illegible] a splendid nest between tender and [illegible] car of Chicago express. Got off at what I thought was Chicago before daylight next morning and walked up the track looking for the town. Soon saw my train coming up at a fearful rate and then saw a mile post which said, "12 miles to Chicago." Oh, how I did club myself. I got here at last, on the [illegible] of the trip, and saw, first thing, a grand spread of free lunch, you know. Just think: pork and beans, tripe, bologna, rye bread and other delicacies. I lingered about there all day and then struck a job. Tell [illegible] I will pay his little bill some day. I suppose Ed. will think I am a [illegible] for sticking him that Sunday night. Tell [illegible] I do not forget the small bill I owe him, and say to Jim [illegible] that I have nothing less than a V, or I would send him the [illegible] I borrowed of him.

Yours A.

◆

No One to Love—None to Caress.

CHICAGO, August 7.

TO THE EDITOR OF THE OPERATOR:

If Mr. Bentley, of Chicago, [illegible] and addresses me in care of the Editor of THE OPERATOR, he will [illegible] a nice-looking young gentleman that opportunity.

VIOLA.

◆

Messrs. Tillotson & Co., of New York, will, through the Philadelphia manager Mr. C. McLaughlin, lay and extend a cable and wires from Philadelphia to Atlantic City, on the line of the new Philadelphia and Atlantic City Narrow Gauge Railroad.

THE
OPERATOR,
A JOURNAL OF
SCIENTIFIC & PRACTICAL TELEGRAPHY.

W. J. JOHNSTON, - - - Publisher.

July 15th, 1877.

DURING MR. JOHNSTON'S ABSENCE IN EUROP correspondents will please address all matter for the literary department of the paper, personals, items of news, etc., to Joseph Christie, P. O. Box 2675, Philadelphia, Pa.

Subscriptions, orders for books, etc., or in connection with THE OPERATOR Purchasing Agency, and all business communications generally, as well as New York City items, to W. J. Johnston, Publisher, P. O. Box 3332, New York, as usual, to whom Post Office orders, drafts, etc., are to be made payable.

WE call the attention of our readers to-day to the long deferred "Eyes of Blue and Eyes of Brown." It is by a lady writer—the author of "Playing with Fire," and is well written.

OWING to the great press of interesting matter, we are obliged to give only a small portion of "The Thorsdale Telegraphs." We will try and give the remainder of it, however, in our two next succeeding issues.

IN the report, June 21st, of the Eastern Telegraph Company, (limited), whose cable and land lines extend from England to India, there appeared an increase in the expenses of $4,500 for the use of patents for duplex working.

Mr. Johnston's description of the Lakes of Killarney, and a minute account of his visit to the Dublin office, in this issue of THE OPERATOR, are very interesting and instructive. The number of operators employed and messages transmitted, delays, salaries, etc., in the gay capital of Ireland are accurately given. Mr. Johnston is enjoying his well earned holiday, and is being received everywhere by our European brethren in a manner befitting the representative of American telegraphers.

WE present this week another story by John Oakum. As the reader will notice, it is written in the character of an old gentleman—the same in which "An Old Man's Exegesis" and "An Evening Reverie" were penned. The story of "Marion Scudder" is apropos of the season. It is a summer idyl, appropriate to the golden days when the wind sighs lazily among the leaves, and the grasshopper turns somersaults on the fields for the amusement of its appreciative friend, the butterfly. To have written such a story, a man may well afford to assume that the sands in life's glass are running fast away, and that but little more remains.

The Great Quadruplex Suit.

The argument in this important suit ended on the 28th ult. The case now rests with Judge Sanford for consideration, and, after the exhaustive briefs submitted by both sides are disposed of, a final decision may be looked for.

The supreme importance of Mr. Edison's invention, and the high scientific character of the witnesses on both sides, together with the commercial value of the points at issue, have attracted wide-spread attention; and a brief *resume* of the attendant circumstances will be necessary to many of our readers to a thorough understanding of the case. Mr. Thomas A. Edison, the inventor of the Quadruplex, in addition to his known ability as a first-class mechanic, has a decided weakness for making contracts, cash down; and, hence, the following somewhat complicated history:

In April, 1871, Mr. Edison, who was then engaged in perfecting the "Automatic," made a contract with one George Harrington, said contract to continue in force until 1876, by which it was agreed that all inventions in "*automatic* telegraphy" made by him (Edison) during those five years should be owned equally by the contracting parties, Edison and Harrington, and that neither should have the right to sell without the consent of the other. This contract was recorded May 6th, 1871. That Mr. Harrington, who had just returned home after serving as our minister to Switzerland, desired improvements in the automatic system *particularly* is plain from the fact that he was about forming, and did form, in conjunction with Messrs. Reiff and McManus of Philadelphia, and others, the Automatic Telegraph Company, from New York to Washington. Subsequently, Edison made another contract with Harrington, assigning two-thirds of his own interest in his own inventions in automatic telegraphy to that gentleman. and giving him (Harrington), power of attorney to dispose of the other third. Harrington afterward sold his rights under these contracts to Jay Gould; Jay Gould, in turn, assigns them to one Mills, and Mills conveys them at a later period, to the Atlantic and Pacific Telegraph Company. It thus appears that the Atlantic and Pacific Company became owners of all inventions of Mr. Edison in "automatic telegraphy" during the period of five years between 1871 and 1876, as provided in the contracts between Edison and Harrington.

Three years before the Harrington contract expired—namely,in 1873—Edison again came out strong in contracts. In that year he contracted with the Western Union Telegraph Company to prosecute, research, and invent in the separate field of *duplex* and *quadruplex* telegraphy, and that said inventions, if any, should belong to the Western Union Company.

In 1874 Edison made another contract with George B Prescott, electrician of the Western Union Company, assigning one half of his inventions in quadruplex telegraphy to the latter person, neither party to sell or use the invention without the consent of the other. In return, Prescott was to pay the expenses of getting out patents, &c. In the same year, (1874), with facilities furnished by the Western Union, and under their direction—as their *employê*, if the 1873 contract was valid—Edison, or Edison and Prescott perfected the famous quadruplex, and late in that year it was worked successfully from New York city westward, on the Western Union's lines.

Although no patents had been taken out on the newly born system, the Western Union authorities at once paid Edison $5,000 on account, but owing, as it is claimed, to Mr. Orton's absence in Chicago, some delay occurred in the acceptance of Mr. Edison's final offer, Mr. Orton relying on the supposition or agreement that disputes, if any, regarding the compensation were to be referred to arbitration. At this juncture, with $5,000 of the Western Union's money in his pocket, Edison again comes out strong in the matter of contracts. On the fourth of January, 1875, he made a contract with the Atlantic and Pacific Co., assigning his inventions in duplex and quadruplex telegraphy to that company, for the sum of $30,000. About this time Mr. Orton accepted Edison's offer to pay him for the entire property the sum of $25,000 down, and $233 for each circuit on which the quadruplex should be used. Edison, in reply, offered to return to Mr. Orton the money already received from him on account, and said he was advised that a previous contract with Harrington would prevent him from assigning the patents to the Western Union. This action was evidently taken in the interest of the Atlantic and Pacific, which company,in addition, claimed a right to all of Edison's inventions in automatic telegraphy for the five years succeeding 1871, the said right being derived by them from one Mills—Mills' right from Jay Gould, Jay Gould's right from George Harrington, and Harrington's right from his contract with Edison, in 1871.

It will thus be seen that Edison made five contracts, viz: One in 1871, assigning half his interest in all inventions in *automatic* telegraphy to Harrington for the ensuing five years: and a second one, supplementary to this, giving in reality the whole of his interest in said inventions to Harrington. These contracts, which had been considered stale and inoperative after the collapse of the Automatic Telegraph Co., are now held, by purchase, by the A. & P. Co. Contract No. 3. was made in 1873, with the Western Union Co., giving to them the results of his prospective inventions in *duplex* and *quadruplex* telegraphy. Contract No. 4 was made in 1874 with Prescott, assigning to him half of his (Edison's)interest in said inventions; and, contract No. 5, in 1875, deeded the entire proprietary interest in the same inventions to the Atlantic and Pacific Telegraph Company.

The patents have not yet been issued, but the Patent Office has expressed an opinion upon this kind of dealing by deciding that the patents shall issue to Messrs. Prescott and Edison. This decision recognizes the 1874 contract between Edison and Prescott, which, in turn, binds them to deliver the patents to the Western Union Co. Suit is now brought by the Atlantic and Pacific to restrain the issue of these patents, and also praying a decree that, when issued, the patents shall be assigned to the Atlantic and Pacific Company.

Suit was commenced in the Superior Court, April 19th, and the case was left with Judge Sanford for consideration on the 28th of June. It has excited the liveliest interest, and collected an array of talent, both as witnesses and pleaders, seldom seen in New York. Among those who testified were: Thomas A. Edison (for the plaintiffs), Hon. William Orton, General Eckert, Henry Van Hoevenburgh, Frank L. Pope, George B. Prescott, Gerritt Smith, and George D'Infreville.

The eminent lawyers handled their subject without gloves, the remarks of Mr. Dickerson on one side, and General Butler on the other, would make interesting reading for the admirers or haters of either party.

It is averred that when Edison was asked by those representing the Western Union how the Harrington contract of 1871 would affect his agreement of 1873 with them, he replied: "Oh, that does not refer to this invention"—(the quadruplex). General Butler claims, on the other hand, that Edison bound himself in 1871 to Harrington, for five years, "body, soul, and brain," and that "all that should spring from his ingenious mind should be covered by it." The main question to be decided now by Judge Sanford, is, whether the contract with Harrington in 1871, regarding "all inventions in "*automatic* telegraphy" was broad enough in its scope to cover a subsequent invention within the specified five years in quadruplex telegraphy.

Whatever the result may be, we sincerely hope that both sides are very close to the end of this treasure-eating competition, and that they may now see the wisdom of putting up their lances and "dented shields." Advertisements are now floating through the newspapers, demonstrating that divers telegraph combinations are purely eleemosynary institutions, gotten up exclusively to act as benefactors to the public—which, of course, does not include operators. If they will give us a rest on these shams, and attempt a policy which will result in benefit alike to both the shareholder and the toiling operator, there will soon be a healthier system of management on both sides, and less legal squabbling and reckless competition.

The Blue Jeans System in Government Telegraphing.

An order issued by the War Department, recites that as no appropriation has been made for telegraphing for the present fiscal year, army officers shall issue certificates to telegraph companies whose lines they use, such certificate stating that so-and-so much is due, but that "the holder of such certificate is to have no claim against the United States, unless Congress shall make an appropriation therefor."

Another order, emanating from the colossal brain of the Postmaster General for the Southern Department, prescribes certain very cheap rates for very long messages, at which Government telegraphing *must* be done, and provides that, how cheap soever the telegraph companies may send messages, "at no time shall the Government"—even at these rates of their own selection—"be compelled to pay more for a twenty-five word message, *including* address and signature, than the public is required to pay for a ten word message, *exclusive* of such address and signature. There is a tinge of satire in the learned Postmaster General's peroration: "This order will materially diminish the cost of Government telegraphing," which, of course, implies that the telegraph companies shall make up the deficit, as well as affording the Government unlimited "trust."

Lightning Flashes and Electric Dashes.

We are in receipt of a great number of letters speaking in terms of high praise of this ably written and profusely illustrated work. As our sales are so great to those not immediately connected with the profession, we think that no telegrapher can afford to be without one. There can be no neater or more appropriate present to a fellow or sister operator than this work, and to your friends in other professions it will prove highly amusing and instructive. Send $1.50 for a copy, or if you can get up a club, send $3.75 for each three copies. This price is to members of the profession only; to others the price is $1.75.

We have a few copies of the third edition of "Oakum Pickings" left—an attractive and popular work which has recommended itself everywhere. The price in full cloth is $1.50; but, in answer to numerous requests, we have issued precisely the same book, with the steel plate engraving of the author, bound in strong paper, at the extremely low price of 75 cents.

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AT a recent visit of Secretary McCrary to the Signal Service School at Fort Whipple, Va., some interesting drill was performed by the telegraph corps. This included the rapid construction and working of flying telegraph lines, the wires being reeled out, erected, and established as rapidly as a man could walk, and as rapidly taken down, repacked, and moved off. After messages had been sent by electricity, messages were sent and answered by seen flashes at a distance of over five miles, and at the same time signals were transmitted and received by the flag motions of the signal code, and by the permanent flag signals of the international code as used for the seacoast service.

The Best Time on Record.

The Direct United States Cable Co. performed a remarkable feat on the 30th of May, in bringing from London for the National Associated Press the result of the Derby Race. The time of transmission from the Company's London office to the New York office was five seconds. Mr. Ward, the superintendent of the New York office, says the time occupied was so short that in reality it could not be accurately computed, but five seconds was the outside limit. It took just forty-five seconds for the dispatch to reach the office in New York of the National Associated Press, from the time of filing in London.

The Atlantic and Pacific Telegraph Company also deserves credit for the prompt manner in which the report of the race was handled after it reached New York.

This item has been unavoidably crowded out of the last two issues.

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MEDICAL TELEGRAPHERS.—A number of the physicians and druggists of East Brooklyn have formed an association for the purpose of connecting their offices and stores by telegraph, and thus not only facilitate their business, but to a certain extent control the transient trade of the neighborhood. By this means a person living at a distance from his famliy physician can, in case of necessity, go to the drug store and have the doctor called, thus saving himself from a long journey and perhaps dangerous delay. A great deal of circumspection will be used in the selection of both physicians and druggists, as, of course, every message sent along the line, unless sent in cipher, can be read in every house or store where there is an instrument. They propose to connect the wire with the Long Island College Hospital and the City and other large hospitals. In case of street accidents or casualties involving human life, a score of physicians could be called before a messenger could reach the nearest station house to telegraph for the ambulance. Some of the anti-telegraph doctors say it is a despicable attempt to get a monopoly of furnishing the coroner with jobs. Meanwhile there is a lively fight going on, and there is a chance of all the sick in Brooklyn getting well for want of medicine.

Themes for the Thoughtful.

Joys are our wings, sorrows are our spurs.

The beams of joy are made hotter by reflection.

Fortune is the rod of the weak and the staff of the brave.

Outward judgment often fails, inward justice never.

Everything, even piety, is dangerous in a man without judgment.

He who can conceal his joys is greater than he who can conceal his griefs.

Death is a friend of ours, and he that is not ready to entertain him is not at home.

How would you be if He, which is the top of judgment, should judge you as you are?

Friendship is the medicine for all misfortune; but ingratitude dries up the fountain of all goodness.

A jest's prosperity lies in the ear of him that hears it, never in the tongue of him that makes it.

There is nothing that is meritorious but virtue and friendship, and indeed friendship itself is but a part of virtue.

As the touchstone which tries gold, but is not itself tried by the gold; such is he that has the standard of judgment.

No company is far preferable to bad, because we are much more apt to catch the vices of others than their virtues, as disease is far more contageous than health.

Small debts are like small shot, they are rattling on every side and can scarcely be escaped without a wound; great debts are like cannan, of loud noise and little danger.

A young man ought to cross his own rules, to awake his vigor and to keep it from growing faint and rusty; and there is no course of life so weak and sottish as that which is carried on by rule and discipline.

It appears to be among the laws of nature, that the mighty intellect should be pursued and cooped by the little, as the solitary flight of one little bird is followed by the twittering petulance of many smaller.

There is nothing more to be esteemed than a manly firmness and decision of character. I like a person who knows his own mind and sticks to it; who sees at once what is to be done in given circumstances and does it.

If this life is unhappy, it is a burden to us, which is difficult to bear; if it is in every respect happy, it is dreadful to be deprived of it; so that in either case the result is the same, for we must exist in anxiety and apprehension.

Handsomeness is the more animal excellence, beauty the more imaginative. A handsome madonna I cannot conceive, and never saw a handsome Venus; but I have seen many a handsome country girl, and a few very handsome ladies.

Managers are the root, laws only the trunk and branches. Manners are the archetypes of laws. Manners are laws in their infancy; laws are manners full grown — or, manners are children, which, when they spring up, become laws.

I will govern my life and thoughts as if the whole world were to see the one and to read the other; for what does it signify to make anything a secret to my neighbor when to God (who is the searcher of our hearts) all our privacies are open?

Without depth of thought or earnestness of feeling or strength of purpose, living an unreal life, sacrificing substance to show, substituting the fictitious for the natural, mistaken a crowd for society, finding its chief pleasure in ridicule, and exhausting its ingenuity in expedients for killing time, fashion is among the last influences under which a human being who respects himself or who comprehends the great end of life would desire to be placed.

Summer Suggestions

'Tis Summer! The bright and gracious season has at length come. It brings cheering hope and bounteous promise to the sad heart. Particularly does it bring hope to the operator who has loaned cash to his office associates, as he views the glad prospect of the debt, which was contracted the previous winter, now being paid. Especially does it bring promise to the one who owes you, and he in turn, hands the promise over to his creditor, lavishing him with assurances that all will be well the next pay day—a period that never comes. Alas! [illegible] won't touch the cash still due, and when the fields are bleak and desolate, and the trees bereft of foliage, then, and only then, does hope leave the creditor's heart, and condemning his folly, he muses upon the idea that it is not safe to be *a loan* in the hands of his debtor, and in pitiful accents he cries: "Owe! Owe! Owe! Alack! I lack! Alack! Adieu! Adieu! Adieu!" 'Tis summer! Genial, gay, torrid, red hot period of the year, we hail thy advent!

Now is the time that operators, goaded to excitement's highest pitch, with nimble fingers write the varied messages, while pearly beads of perspiration drip from their scholarly foreheads to the snow white blanks beneath; and while the blank becomes spotted, he gleefully conceives the manner in which the receiver of the message will deeply scrutinize the blank, and think she sees a lover's tear drops that fell to the blank when he was writing the message in a distant city. Delightful delusion! 'Tis Summer! cheerful, gladsome, trystring time.

How ardently the wearied telegraph knight looks forward to the time of his vacation, and in the exuberance of his joy exclaims: "Now I shall see the fair maid of the mountains—the angel to whom I have written so often during the past year. I will seek her in the rustic shades that render the little telegraph office, where she is a queen, a miniature paradise, and with heart as warm as the bright summer days, will I speak my love in simple words. I have never seen her, but often have I pictured to myself the dark tresses, the lustrous eyes, the finely chiseled face and faultless form that beautify my adored one! "Now will I see her in reality." And he does. She is red haired, freckles large and numerous, a wart on her nose, complexion sallow and wizzened, age uncertain but venerable.

He is disgusted. Bright hope and happy anticipation have fled, and as he reluctantly pays his "sub" $35 for two weeks' services, he thinks it a dear price for so great a disappointment.

'Tis Summer! Its three golden months—July August and September, have, really come! And still with all its peace and serenity, its holy, calm and sacred quietude the operator is not at ease. The glad serenity of his life is broken. His sweet complacency is put to flight. Why is he thus afflicted? Another reduction! The average operator has run deeply into debts on the prospective cash, and now rise up before his mind and tantalize him with their number and magnitude. In the silence of the night, when you imagine him to be seeking, by recreation, strength to bear the toil of the morrow, he is quietly packing up his few effects at the boarding house, and soon is out in the silent city, with a bundle of clothing on the end of a stick across his shoulder, hurrying to catch the last freight train and be borne away from the scene of frugal toil, and hundreds of little vexations too small to detain him.

'Tis Summer! And—but just wait a minute! A friend asks me to take something! I am thirsty with curiosity to know what he means, and I must stop.

RUDDY.

* * *

Scientific Department.

[This department is under the charge of Mr. H. Van Hoevenbergh. [illegible]]

ELECTRICAL MEASUREMENT.

VI.

[illegible]

It is nearly impossible to gain anything like an accurate knowledge of electrical measurement, without actually going through the necessary operations. An idea of the manner in which measurements are made may be gathered by the mere study of elementary works upon the subject (there are one or two exceptions); but the precise method of handling the instruments, as well as easily and quickly making the tests and calculations, can only be learned by actual experience, obtained by the manipulation of the apparatus, and close observance of the connections made and results attained; all else is mere book learning—a good thing to have, doubtless, but a slender reed to lean upon in case of trouble or necessity.

But the number of operators whose means enable them to possess the necessary apparatus, or who have access to it, is exceedingly small. It is for their benefit that these articles are prepared, and it is believed that no easier or less expensive method of acquiring this most useful knowledge exists. To those the manufacture of the instruments described in the previous articles in this department is recommended. It is not claimed that extremely delicate or accurate measurements may be made by their use, but for learning the rudiments of the art, and familiarizing the student with the application of the principles involved they are as good as the best. They also possess the additional advantage, that if accidentally burned or otherwise injured, no great harm is done; no bill of thirty or forty dollars for repairs is necessary.

The method of connecting up the galvanometer for use in measuring resistances with the Wheatstone Balance is very simple. The easiest way, perhaps, is to arrange the connections permanently, on a board," by themselves. The materials required are:

A piece of hard wood board, walnut if possible, about three-fourths of an inch thick, and six inches square.

Eight binding posts.

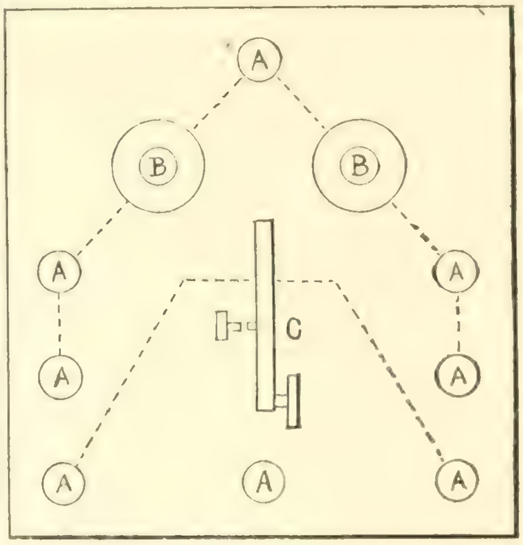
A key without circuit closer. (One may be made of brass if nothing better can be obtained).

Two common spools.

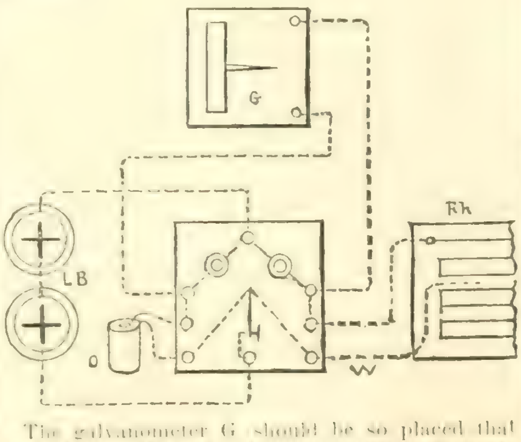
About two hundred feet of fine relay wire.

Two screws.

Cut the wire into two pieces of exactly equal lengths. Wind one piece on each spool, and arrange on the wooden base according to this diagram:



A A A are the binding posts; B B are the spools, and C is the key. Make the connections as shown by the dotted lines. When finished, connect it with the battery, galvanometer and rheostat in this manner:



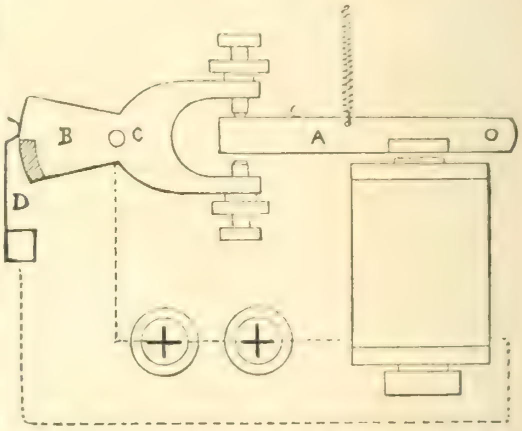
The galvanometer G should be so placed that both the needle and coil range north and south, the pointer projecting toward the east. The indicator should then be placed so as to indicate the zero point, or the position of the pointer when no current is traversing the coil. It need not be moved during the tests. The connections having been made as shown, the object to be measured, O, being in this case a magnet spool, the key C should be pressed down, thus closing the circuit from the battery L B. The galvanometer needle will be diverted, as shown in Art V., and may be returned to zero by "balancing" on the rheostat, Rh, with the wire W. When a point is found where the needle does not move, whether the key be opened or closed, the exact resistance of the object has been found.

This method of measurement is very convenient and accurate. Variations in the strength of the battery do not affect the results, so that an absolutely steady current is not required, as in the first plan explained.

The manner of testing the internal resistance of a battery by an adaptation of the Wheatstone Balance, will be the subject of the next article.

ELECTRO MECHANICAL MOVEMENTS.

No. 5.



This movement is one of a large class that have been used at different times, for the purpose of obtaining continuous and uniform vibrations upon a circuit.

The circuit being closed, the movement of the armature and lever, A, causes the shuttle, B, to rock upon its pivot, C. This places the rounded end of the spring, D, on the insulated part of the shuttle, thus opening the circuit, and allowing the lever A to be drawn up by its spring. This shifts the shuttle so that the spring makes contact with the metal, closing the circuit. The lever A then again moves downward.

The above operation will be continued as long as the battery lasts.

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Improved Electro-Magnet.

M. Cance has called the attention of the French Academy to a new system of electro-magnets with multiple cores, similar to that of Camacho, but with series of small rods of soft iron substituted for the tubular cores, and enveloping the different coils. The rods are all put in contact with the breech of the electro-magnet, and strongly fastened at their base with a bronze collar, so as to make one solid piece. This arrangement is said to offer the following advantages: 1. Retaining permanent magnetism very little (as the demagnetization of the rod is almost instantaneous.) 2. Giving a sphere of lateral attraction as extensive as may be desired (since it is in relation to the number of rod cores.) 3. Easier construction than that of electro-magnets with tubular cores. The sole inconvenience is that the system gives pretty strong sparks of extra current; but with systems of interrupters by deviation from the main circuit or condenser, the evil may be obviated. —*Sci. American.*

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HONI SOIT QUI MAL Y PENSE.—The San Diego World says: San Diego has a young gentleman telegraph operator, who, after repeated calls for a young lady operator in another office, at last got a response, and then he telegraphed back to her vehemently. "I have been trying to get you for the last half hour!" In a moment the following spicy reply came tripping back to him over the wires from the telegraphic maiden: "That's nothing; there is a young man here who has been trying to do the same thing for at least two years, and he hasn't got me yet."

Echoes from 197.

Coney Island is popular with telegraphers.

Dennis Brown has been put on the 12 to 9 trick.

Eddy Welsh calls Gus Coleman "the man with the shaved head."

Mr. Van Orden, of the Board of Trade Telegraph, is spending his Vacation in Springfield, Mass.

Miss Nellie Hammond, of Boston, was added to the ladies department on Monday last.

Bill Noyes says there isn't fat enough in Holliston to soil a kerchief. Guess he struck a stone quarry.

Fred. Cook is quite a clever artist. His caricature of the recent fire was both humorous and capitally drawn.

Willie Ogden, who resigned in May, has gone to California for his health. He will probably return in the Fall.

We met Charley Murphy on Broadway the other day. He has given up all idea of returning to the office again.

Chief operator Tobin was seen gracefully disporting in the waves, at Coney Island, one afternoon last week.

Fred. Baldwin, Charley Parr, and Johnny Moffitt, have organized a party for a month's hunting and fishing in the Adirondacks.

Messrs. Blanchard and Stark are the latest additions to the day force, after eighteen months experience with the dreaded 12 to 9 trick.

Mr. Bacon, formerly of the A. & P. Chicago office, fills Mr. Ahearn's place on the night force, the latter gentleman returning to his home in Ottawa.

Charley Howlitt's "reminiscences of frontier life," for originality of thought, and terseness of expression, are equal to Bret Harte in his happiest mood.

Fred. Cushing has been relegated to Saratoga to assist during the races. He will remain there during the remainder of August, returning Sept. 1st.

Mr. Gainor has gone East to spend a fortnight, and his place is very ably filled by Mr. Taylor, of Springfield, whom we all know to be a clever gentleman, and a splendid operator.

Tom Quads' old friends are glad to see, by his sketch in the last OPERATOR, that he is still alive, and has not yet forgotten the profession which he so well adorned, although practically out of the business.

George Hubbard, formerly right manager of the A & P at 11 Broad street, but late of the W. U. office at 5th Avenue Hotel in this city, has been transferred to the main office, and put on the 5:30 to 12:30 force.

Mr. Yackley being transferred to day duty, and Mr. McManus having resigned, caused two vacancies on the regular night force, which were filled by Mr. Sheldon, an old timer, lately connected with the Elevated Railroad, and Mr. Cherry from Montreal.

Harry Robinson, one of the most gentlemanly boys we have ever known, has resigned his position as clerk, to accept a similar situation in a large broker office on Wall Street. He will succeed, too, if politeness and brains are the conditions of average success.

Are we to have no pic-nic this year? under the auspices of Messrs. Ashhurst, McEneeny, Singleton, Pierce and others, the pic-nic of 1876 was a grand success, and heartily enjoyed by all present. Have these enterprising gentlemen lost all desire to contribute to popular pleasure a repetition of last year's enjoyment?

It is a fact not generally known that John Claws, operator at Kelly & Bliss' Pool rooms, was for many years chief operator of the California State Company, at Salt Lake, Utah, and afterward manager of the W. U. at Sacramento, Cal. His present position, during the sporting season, should be worth at least five hundred dollars a month.

Owing to the lateness of the hour when we received our intelligence, we were unable to learn the names of any but Sam Welt and Charley Holmes as having gone from this office to assist in quelling the rioters. We since learn that Messrs. Geo. J. Randall, John J. Mather and John J. Callahan, all from the clerical departments, accompanied the 9th Regt. to Albany, and remained until the conclusion of the riots.

Miss Rossman did not leave for San Francisco August 1st, as stated in our last issue, but postponed the date of sailing till the 15th, intending to go *via* Aspinwall and Panama. Finding it impossible to lose so much valuable time, she left quite suddenly by rail on Thursday evening last, the occasion being made a very pleasant one by the assembling at the Grand Central Depot of a large number of ladies and gentlemen, the majority of whom were members of this office, to wish her a safe and pleasant journey. It is rumored that two other ladies from Miss Daly's department will soon leave for the same destination.

Considerable speculation having been indulged in, regarding the amount of mail matter handled at the Western Union Post Office, we recently interviewed Postmaster Holmes on the subject, and through his courtesy are enabled to furnish the following particulars: "The amount of mail," said Mr. Holmes, "that passes through this office, is simply enormous when you consider it is a private concern. Fifteen hundred letters and cards pass in and out daily, or about forty thousand letters a month, besides all the old messages, reports, vouchers, statements and requisitions from all the W. U. offices in the country which come by express." When it is remembered that this entire work is performed by Mr. Holmes and one assistant, Willie Cunningham, it will be seen that the position is no sinecure, though such is the general belief.

We learn from Boston that J. J. C. Wilson, a well known telegrapher of that city, made his *debut* in concert during the month of July, at Music Hall. We are unable to state the gentleman's qualifications as a singer, but they must certainly rise above mediocrity before one would dare face an audience so critical and cultured as those in the modern Athens. It may be interesting to note in this connection, the different telegraphers who have achieved success in the musical world as singers

William B. Fessenden, an old telegrapher, is today the finest tenor in New England, and when it is considered that Boston is the city of highest musical culture in America, we may well feel proud that a singer so distinguished has risen from the ranks of our over-crowded profession.

Mr. Fessenden enjoys a large income from the exercise of his talents, and has refused several brilliant offers to to travel in opera. When William Castle severed his engagement with the Kellogg English Opera Company, Mr. Fessenden was offered his position as leading tenor of the troupe, but declined, owing to more lucrative engagements at home.

Thomas A. Davin, for many years chief operator of Boston office, possesses a tenor voice of great sweetness and volume. He is a member of the choir at the Immaculate Conception, and receives eight hundred dollars a year for his services.

Charley Stanford, believed by many to be the fastest sender in the profession, though not a singer of unusual excellence, is a fine baritone, and by years of patient study, has made himself one of the most popular of the non-professional singers in the Hub. His wife, a highly cultivated lady, is the leading soprano of a fashionable South End church, and receives a yearly salary of one thousand dollars. In the New York office, David McAneeny, George Walcott and Edward Kearney, are the only singers of any prominence. McAneeny is a salaried member of St. Peter's choir in Jersey City, and the other two gentlemen, we understand, are at present disengaged.

◆

Another Plug Factory.

PHILADELPHIA, Aug. 7, 1877.

TO THE OPERATOR:

Seeing that you took in the Western Union man at Kansas City so promptly, I wish to point out another plug factory. This time it is in the Quaker City. The following advertisement in our daily papers tells the story:

> **Telegraphing!** YOUNG MEN AND WOMEN wishing to become practical Telegraphic Operators are invited to call at the New Telegraphic Department of the Bryant & Stratton Business College, **108** S. TENTH Street. Instruction by the Manager and Electrician of the Atlantic and Pacific Telegraph Company, with whose offices the department is connected by direct wire. Circular giving full particulars, free.

Upon application at the "College," your correspondent received a flowery description of what a telegrapher's life is, and he also received a circular. This circular sets forth that Julien Soule, "Manager and Electrician of the Atlantic and Pacific Telegraph Company," has entire charge of the department. The time required, it says, to become a full fledged operator cannot be exactly specified "but three months of careful study should be the limit." "Very few operators," it says further, "understand the connection of instruments," &c., and it is thus implied that Soule's unlucky dupes are to be "graduated" so much superior to common operators who work their way up from messenger boys.

ALDUS.

Dashes Here and There.

THE City Council of Galveston, Tex., has ordered a Fire Alarm Telegraph which is to cost $6,000.

TELEGRAPH operators along the line of the Pennsylvania Railroad get $29 per month. First class fireman in the U. S. navy get $31.50.

THE Mayor of St. John has made public, through the local press, that all messages sent over the wires by his office, on behalf of the sufferers by the fire, were sent by the Western Union free of charge.

DURING the late strike excitement somebody telegraphed to the Middlebury, Vt., militia, to proceed to Rutland at once. They got out their blunderbusses and Queen Anne's, bid good-bye to all their friends, and—found it was a grand joke.

A COUNTRY operator smuggled a message through, deadhead, for the village barber's daughter, and when the auditor returned it to him for collection of tolls he explained to the superintendent that he "never *tolled* his love. The superintendent *told him*—to go home.

THE recent successes in producing a steady light from electricity appear to have stimulated rather than abated efforts in the same direction. M. Reynier has communicated to the Academy of Sciences, Paris, an account of an electric lamp, intended to give light for twenty-four hours.

WE searched the newspapers in vain for accounts of some glorious deed of George Eitemiller in quelling the riots. Yet in six months he will be travelling through the country, telling us how he staid in burning buildings, sending military orders, even after the wires were burnt up. He had better settle that other matter too—about sticking in '68.

THE London, Eng. *Telegraphist* says the telephone enables us to "tell-a-fun" ny story. The same excellent periodical, which, by the way, every one in this country should subscribe for, also says that Ipswich is the greatest switch in England. If we thought they would see the point, we would say they are judging only by the number of "plugs" in it.

ON July 5 a very severe thunder storm passed over London. Many were stunned, and in several cases rendered insensible. Some telegraph wires were struck and fell in red hot fragments, giving out a great deal of yellow smoke. The instruments at the office with which the destroyed wires were connected were much agitated, and the operator, a girl, was stunned.

IN our issue of July 15th, in an article speaking of P. C. and St. L. R. R. new office, it was inadvertently dated Cincinnati. It should have been Logansport, Indiana. We regret that Cincinnati should have made temporarily so much capital out of the enterprise of her sister city, but, we are sure, from the well known and able telegraphers mentioned in the article, that no one believed it was any other place than Logansport.

DURING the late riots the mob charged on the Western Union office at Harrisburg, Pa. [illegible] Ziegler sealed himself up in a "collect" envelope, directed to Chief Engineer P. M. Arthur and dropped himself in the letter box while [illegible] climbed up the lightning rod to the roof. The mob called Pittsburg, but, as usual, no one could raise him in anything under a two hours steady call, so they departed in disgust.

CHINA'S FIRST TELEGRAPH LINE.—The first telegraph line in China is now in operation. It is six miles in length and has been erected by Li Hung Chang, Viceroy of Chili, from his official residence to the [illegible] arsenal. There has been no attempt at interference by the native populace, as in the case of telegraphs erected by foreigners. Several lines are contemplated in Formosa by the Governor of that island.

A REMARKABLE INVENTION.—Another apparatus pertaining to electricity, quite as wonderful as the telephone, though perhaps less calculated to attract popular notice, has recently been patented in the United States by a Swedish inventor. The apparatus is an automatic railway signal, which enables the station officers to know the precise position of any train at any time; it gives visual signals to the engineer and at the station before the train enters, thus enabling switches to be opened and arranged in time to prevent accidents. When trains approach each other, whether running in the same or opposite directions, the engineers of both trains receive warning in time to prevent collisions, and the station people are at the same time automatically informed of the position of both trains. Any train may be stopped at certain points on the road where "[illegible] are arranged upon telegraphic communication with the stations at both ends of the route, and two trains may in the same manner telegraph to each other. A complete record is automatically kept at each station of the speed of each train and of the exact time it enters or leaves the station. Stop signals may be sent at any time from the stations to any train while moving. The apparatus may be arranged to send stop or danger signals to trains approaching swinging bridges which are not properly locked and fastened. When this invention shall have been generally introduced railroad accidents will be almost impossible.—*Cairo Democrat.*

INTEREST IN TELEGRAPHIC PAPERS.—The lack of interest in telegraphic literature and papers came to my notice a short time ago. I was in some small towns in New Jersey. In one of the telegraph offices, the W. U. I think, I entered into a pleasant conversation with the manager upon the general topics of the day, and when I showed him a copy of THE OPERATOR he looked it over pretty thoroughly and remarked that he thought it a very good paper. I then asked him if he would like to subscribe. He tried to be funny, and said his bank account could not permit it. That is all nonsense! If he would deprive himself of one or two cigars daily he would soon save money enough to subscribe to THE OPERATOR for a year. I asked him to try it for three months, but he could not make up his mind to do even that. Such is an example of a specimen of the telegraph trade. Others that I visited were much interested in the paper, and some became subscribers when they received their pay.

SUBSCRIBER.

* * *

Answers to Correspondents.

Johnstown, Penn. They have no right to force you into military service, your position as a telegraph operator exempting you in your State. The law (8 April, 1862, Sec. 1, Pamphlet Laws 325) says: "The operators, assistant operators, clerks, and other persons in the employ of the different telegraph companies of the State of Pennsylvania, while doing duty in the offices of said companies, or along the routes of their telegraph lines, shall be exempt from militia duties and from serving on juries, and from any fine or penalty for neglect thereof." See Brightley's Purdon's Digest, Vol. L. W., page 1,594.

STUDENT.—"*Apart from my duties as a telegraph operator, I am in the habit of devoting my spare time to the study of mathematics, geometry, etc. Being asked, a short time ago, to give the solidity or contents of our earth in miles, I calculated by the usual method for finding the solidity of globes, and was told that my calculation was incorrect. Living in the country at a small railroad station, I have not the opportunity of consulting authorities, and now apply to you to aid me.*"

Our correspondent seeks our aid in a matter not pertaining to the objects held in view by this journal; nevertheless, we commend his studious endeavors, and will go out of our way, for once, to aid him in his dilemma. He made his error in calculating for the solidity of a globe, whereas the earth is a *spheroid*, which, mathematically considered, differs from a globe in having two diameters—a major and a minor one. This is occasioned by a depression or "flattening" of the earth at the poles, and renders the calculation of its solidity more complex than that of a globe, which has but one diameter or axis. If "Student" will square the major axis of the earth 7,925 miles and multiply the product by the minor axis 7,[illegible] miles, and again multiply by the fraction .5236, he will obtain the solution he desires, which gives a formidable array of figures (a mere [illegible] of [illegible] though [illegible]), amounting to two hundred and sixty thousand millions of miles—the solidity of the earth.

PERSONALS.

Manager O. W. Storey, of the P. R. and P. T. Co., Philadelphia, is very unpopular.

R. G. Callum has resigned from Lake City, Fla., and has been succeeded by C. C. Robertson, formerly of New Orleans.

Messrs. C. Whitehill and G. W. La Rue, both of the Ohio N. G., have been on duty with their respective commands during the late troubles.

Mrs. Brown, of the Pottstown, Pa., W. U. office, has been off on a vacation, Mr. Tindell of Mahanoy City, having had temporary charge of her office.

Our old friend J. M. M., whose writings have been read ere now with great interest, has an interesting article on the telephone in the London, Eng., *Electrician* for July.

The Zanesville (O.) *Times* recognizes its obligations to Messrs. J. C. Wilson and Frank Halstead, of the Atlantic and Pacific for their extended and faithful labors during the strike.

Bert Deane, of Woonsocket, R. I., has recently been appointed agent of the P. and W. R. R. at Milford, Mass. He is a first class operator, and his new position is one of great trust.

Robert A. Meier, late of the Philadelphia W. U. main office, is studying law in that city. If Bob becomes as good a lawyer as he is an operator, we will not fear for his success.

Johnny Langstaff, late of the "N. A." G. T. R. office, Montreal, has gone to Morrisburg, Ontario, as day operator for the same company, with a hope of recovering his failing health.

Will Ed. Murphy, formerly of Chicago, or Tom Thornton from Mexico, who was last heard from at Winnemucca, Nev., please send the address of one or both to "Operator, Altamont, Alameda County, California?"

N. F. Alston, of Warrenton, N. C., would like to know the address of S. C. Potts and Junius D. Potts, formerly with the W. U. Tel. Co., near Wilmington, N. C. Can any of our readers inform him of the whereabouts of the above named gentlemen.

August Doudel, of Pittsburg, deserves mention as a model telegrapher in an emergency. On Saturday, July 21st, he stuck to his key at the depot, and only left it when the howling mob fired the building. His last message was: "Fire's too hot. Good night."

Miss May Alice Christie, an experienced telegrapher of three and a half years, stood upon a chair on the stage to sing at a concert in Philadelphia, on the 25th ult. She rendered "Three little kittens—They lost their mittens," in a lusty if not precisely an artistic style, and was warmly applauded.

FROM MONROE, LA.—G. A. Singer has resigned from the management of the W. U. at this place, and gone into other business. His successor, T. G. Pugh, formerly of Trenton, La., promises to make business quite lively, and is well liked. "Johnny" Windes, the best fourteen year old operator in the country, is his assistant.

GALVESTON, TEX.—Miss Anna Pollmar has resigned and accepted a position on the Military Line at San Antonio, her former home. David Campbell has also resigned, and goes to New Orleans. Walter Ducie of the Cotton Exchange, has been promoted to Mr. Campbell's position, and G. W. Little, of Jefferson, Tex., succeeds Mr. Ducie at the Exchange.

WASHINGTON NOTES.—Del Marean and H. McKelding are off on vacations. Geo. L. Diven has just returned from his vacation. Messrs. Lombard and Wynne have also been off for a week, sailing and fishing down the Potomac. R. J. McCarthy has returned from a month's trip to Georgia, much benefited in health. Fred Marean takes a place on the Associated Press wire temporarily, while Vory De Graw acts as reporter during Mr McKee's absence. O. D. Ladow, of the Atlantic and Pacific has accepted a position in the Agricultural Department, and also the night managership of the Atlantic and Pacific Company's office here. Mr. Bickford has been transferred from the night to the day managership of the same office.

C., B. AND Q. PERSONALS. West End: Mr. Charles Howe still holds trains nights at Clarion. Mr Robert Quigley is now at Arlington, Ed. Kinney at Malden, F. Eck at Princeton, L. R. Sykes at Knoxville, E. W. Brunton at Elmwood, Mr. Butler at Yates City, Mr. C. B. Waite at Peoria Freight House, Messrs. F. A. Jacobs and C. M. Hennick at Monmouth, Messrs. Moran and Silvermail at Monmouth Crossing, W. L. Barnes at Kirkwood, Messrs. Mulligan and Ward at Biggsville, and Messrs. Lynch and Darch look well to the company's interests. At Galesburg Mr. F. C. Rice has taken the place of J. R Ballantine, as chief operator, and Mr. Lamereaux steps into Mr. Rice's shoes. At Cameron "Fatty" Green and Mr Thomas Bove watch trains. Mr. Fuller on the main line, A. Chittenden on Peoria division and Mr. John Odel on Keithsburg branch prevent collisions, and at nights Messrs. Speed, Hopcroft, and Lamereaux hold the main line steady, alternately. Messrs Cliff Nichols and V. P. Clute are on the Burlington division.

BIRTHS.

Aug. 8th, 1877, to A. O. T. Pennington, agent and operator Mo. Pac. Ry., Knob Noster, Mo., a daughter. Weight eight pounds. 1st edition.

DEATHS.

BARCLAY.—At Reisterstown, Md., August 8th, Julia, beloved daughter of Charles J. and Hattie L. Barclay, aged 6 months and 16 days.

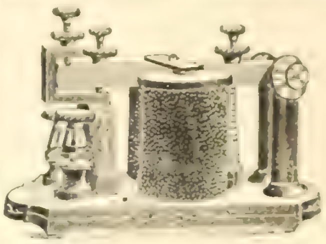
The [illegible]
Called hence by early doom,
Just [illegible] flower
In Paradise [illegible] bloom.

CAPERS.—At Camden, S. C., August 6th, Sidney W. Capers, of consumption, in the 39th year of his age.

He was formerly chief operator of the W. U. office at Charleston, S. C., and was universally esteemed for his sterling traits of character.

ZELLNER.—At Allentown, Pa., on the 28th ult., Allen M. Zellner, of the Western Union Telegraph Company, aged 25 years.

The deceased was sitting Past Grand Master of Wreath of Friendship Lodge, I. O. O. F., No. 917, of South Bethlehem, and his premature death is widely regretted. His funeral was largely attended, six operators and six Odd Fellows acting as pall-bearers. The operators of Allentown, Bethlehem and Easton contributed a beautiful floral wreath, consisting of an anchor and cross combined.



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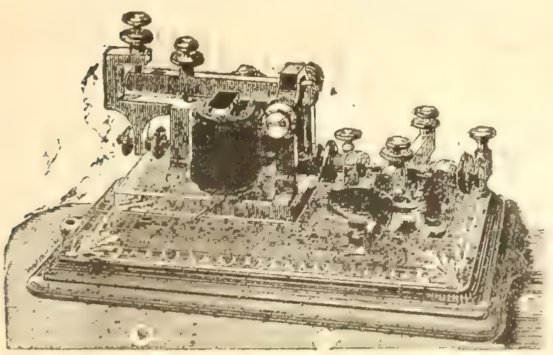

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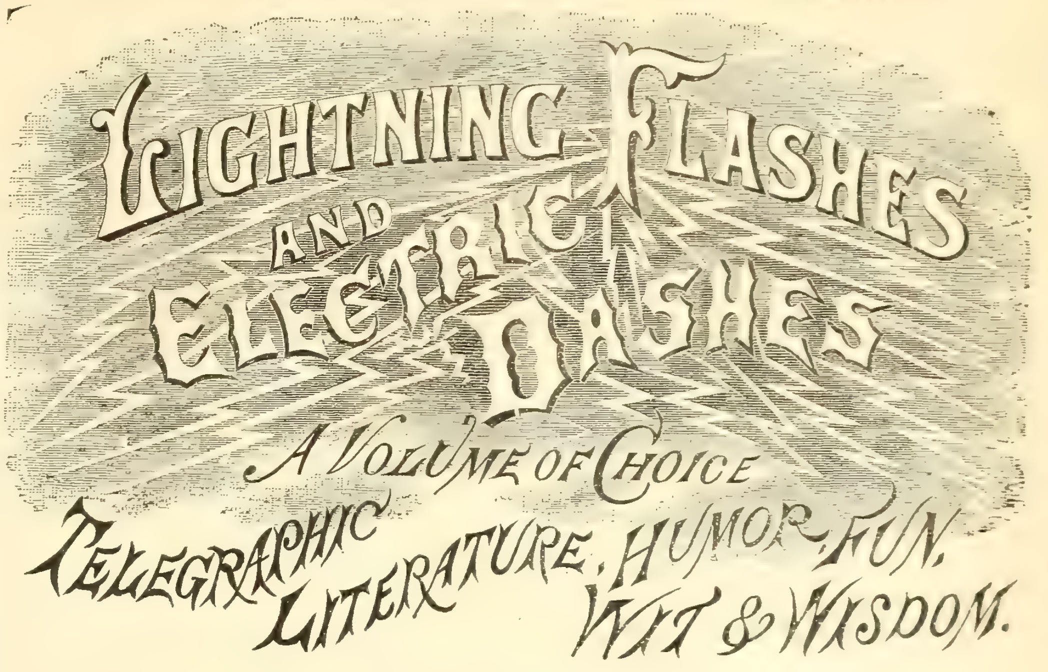

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Contents of "Lightning Flashes."

"The Volcanograph," by J. Christie, illustrations: Give them another turn, urged the D[illegible]—But the Volcanograph cut them short—"A Leaf of Autobiography," by John Oakum; Biography [illegible] Ced), with Portrait; "Prof. Morse and the Telegraph," Benson J. Lossing, LL.D.; Illustrations: Samuel F. B. Morse [from a Photograph by Sarony]—Morse's First Recording Telegraph—[illegible] guerreotype of the Face made in America—Facsimile of the First Telegram, with a [illegible] Indorsement of it—Morse's Residence at Locust Grove; Biography of D. C. Shaw, [illegible] with Portrait; "The Telegraph Dispatch, a Story of Telegraphy in the Early Days," by J. D. Reid; Biography of Joseph Christie (Werner) with Portrait; "Wives for two, or Joe's Little Joke," E. O. Chase; "[illegible] Foot Race with a Telegram," Ralph W. Pope; "Leander's [illegible] of Investigation" [illegible] Investigating Committee;" "Song of the Wire"—Poem; "Some Gray [illegible]"; "[illegible] chanical Romance," Charles Barnard, [illegible]. Illustrations: A [illegible] air—the girl sat in the fireman's high seat—Kate unrolled the wire and [illegible] senseless and white; "Out of Adjustment"—Poem, G. W. Russell; "[illegible] gram," Joseph Christie; "A Perilous Christmas Courtship, or, Dangerous Telegraphy," J. M. [illegible]; "Playing with Fire," L. A. Churchill; "Thoughts for Serious Moments;" "A [illegible] Mistake," L. A. Churchill; "The Telegrapher's Song," J. A. Wythe; "The Telegrapher" (Illustrated), Joseph Christie; "The Vow of the Six Telegraph Operators," G. W. Russell; "Some [illegible]" [illegible] Watts (Yosef); "Scrapes," Geo. H. Bliss; A Reminiscence (Illustrated) Joseph Christie; "[illegible] (Illustrated) J. A. Clippinger; "The Telephone"—Poem, James [illegible]; "[illegible] Atlantic;" "Snags," Geo. H. Bliss; "How a Signal Service Man Lost his Sweetheart;" "A Centennial Telegraphic Romance," W. J. Johnston; "By Telegraph"—Poem; "An Evening Reverie," W. P. Phillips; "What Came of being Caught in a Snow storm," Ned Kent; "Into the Jaws of Death—a Telegraph Operator's Story," H. Van Hoevenbergh; "Hamilton Doless," W. C. [illegible]; "Scenes and Incidents in a Signal Service Office," Tracy Barnes; "Our Night Car," Joseph Christie; Lightning Anecdotes; "A. D. 1901" (Illustrated) J. J. Calahan; "The Quadruplex" (Illustrated) Joseph Christie; "Putting 'Lo' at the Batteries" (Illustrated) Joseph Christie; "A Ludicrous Mistake;" "The Carnival of Oshkosh—a Tragedy in three acts," [illegible] Jr., (Chops). Illustrations: three full page pictures, drawn by J. J. Calahan.

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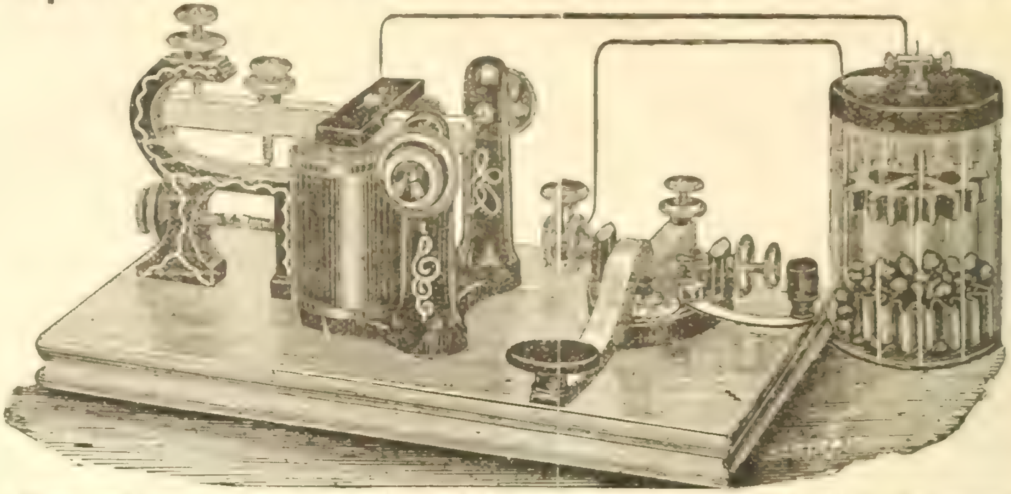

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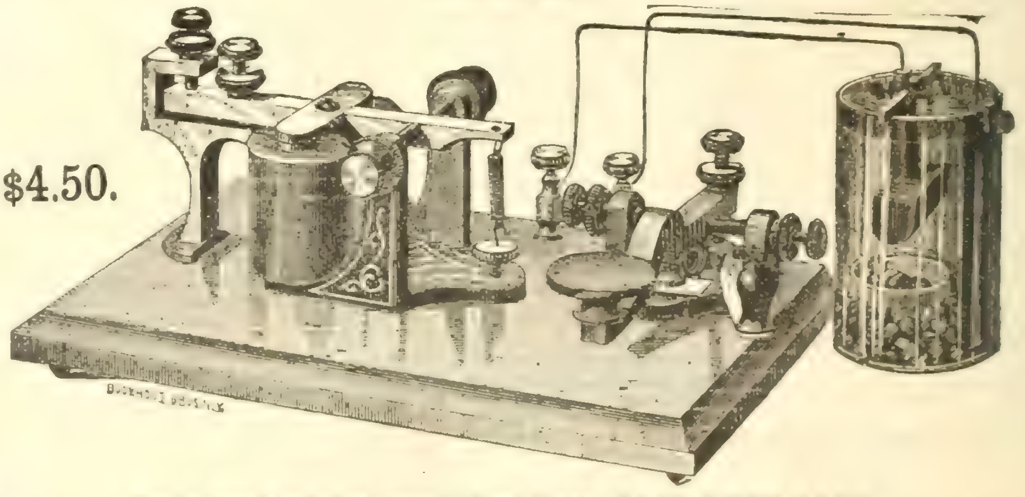

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